



RESISOR  
Historia Social Única

WHITE BOOK

ELECTRONIC SINGLE SOCIAL RECORD OF ANDALUSIA

(ESSR)

(EXECUTIVE SUMMARY)



# ELECTRONIC SINGLE SOCIAL RECORD OF ANDALUSIA (ESSR)

## WHITE BOOK

### (EXECUTIVE SUMMARY)



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## PRESENTATION -

The **Electronic Single Social Record - RESISOR** project, of the EaSI Programme, is one of the most enthusiastic and innovative initiatives that have been developed in the framework of social policies in recent years. A European initiative, implemented and led by Andalusia that has placed us once again as a region of reference in the management of information systems in the field of social services and in the expansion of social rights with very positive results in the Welfare State.

During the last four years, we have worked on the development of this digital tool which will allow us to improve the service provided to the users of the social services, facilitating the integration personal information from different sources into one electronic document with all of the information of the beneficiary of the resource or service.

An ICT tool that will facilitate a state of the art management, focused on the users and professionals, and on the transparency for citizens and continued assistance in the service. In accordance with the Social Services Law, approved in the Parliament of Andalusia in 2016, RESISOR opens the door to institutional collaboration in real time and for that reason we have had the support and collaboration of the Andalusian Federation of Municipalities and Provinces (AFMP) from the very beginning.

In the same way, four Andalusian universities are collaborating with the Regional Ministry of Equality and Social Policies in the evaluation of the project at all stages. The result of the evaluation of the pilot phase, developed in the City Council of Dos Hermanas, has provided us some excellent results, which inevitably lead us to new development and implementation scenarios for the ESSR.

We are confident that this experience, once developed according to regulations, will provide great benefits to Andalusian society. Its proper dissemination will allow us to transfer the results obtained in this research to the population as a whole, as an example of good practices to share and extrapolate.

The Regional Government of Andalusia continues its commitment to placing people and families in the epicentre of efforts, making our territory inclusive for all its inhabitants.

This white book is the latest evidence of the progress of the European RESISOR project, and presents us with future scenarios which we should confront for the implementation of the ESSR as a fundamental part of the digital transformation of Andalusian social services.

**MARÍA JOSÉ SÁNCHEZ RUBIO.**  
**Regional Ministry of Equality and Social Policies**  
**Regional Government of Andalusia**

## 0. - INTRODUCTION

One of the key aspects in Public Administrations is to achieve an evolution from a traditional management to a knowledge-based management, and also to get that knowledge to be controlled by the organization itself. In this innovation exercise we must also promote the long road of the digital transformation of social services in Andalusia and be one of the models to consider when it comes to unify systems and models among all the Autonomous Communities, and even at European level. This will be impossible without a strategic commitment to research, development and innovation in social services in Andalusia and the active participation of our institutions in key projects, both nationally and in European Union funding programs, collaborating in the consortia that are organized with Andalusian Universities and leading companies in our sector. The achievement of increasing our participation in R+D+I and getting some financial return will allow us to evolve towards excellence in a faster manner and become one of the reference points. Thanks to this excellent development and the results achieved in the RESISOR Project, we will be able to acknowledge that this challenge is possible and for that, we will continue committing to organise a strategy for participation and positioning in our sector.

There are many management improvements that will make possible the implementation of the Electronic Single Social Record in Andalusia. I would like to highlight, among other things, the interoperability of the systems, the possibility of exchanging information at a higher speed with other administrations and management entities with which we work daily, also eliminating repetitive procedures, as well as improving the monitoring and rationalisation of expenses related to benefits in order to optimise a fair share system. Furthermore, administrative tasks will be simplified, facilitating the use of current tools and, overall, walking the difficult path of making something complex simple and friendly for the professionals and users.

We should not forget the challenge that this will pose for the social services professionals to better take advantage of this new shared digital environment, with new rules of the game regarding transparency, information confidentiality, security and traceability standards and data control, new semantic, ontological and taxonomic agreements, and the need to be retrained as quickly as possible without creating a digital breach among professionals of the sector.

There is no doubt that all of this also results in better citizen service, ensuring a comprehensive vision of the beneficiary groups and people, and therefore, the continuity required in the attention and provision of social services, putting people at the centre of the operation. An administration that is closer to the people, more user-friendly, reliable, transparent, efficient, fast, high-quality, sustainable, homogeneous, and which will improve its procedures through Information and Communications Technologies.

And if we look towards the future, we're opening the door to implement tools which help us to carry out an intelligent analysis of the information to make decisions, and facilitate research, statistic and epidemiological studies. Therefore, we need to obtain this budget allocation which is key for achieving all of the proposed scenarios in this book, involving all of the stakeholders in the Andalusian social services system in order to have a common tool that operates in real time from anywhere in our region.

Finally, I would like to again highlight the efforts that we must make in Andalusia to maintain the leadership we have achieved in this field with the RESISOR Project, serving as a model for the transition of other regions and maintaining a spirit of continuous improvement in the Public Administration.

**MANUEL MARTÍNEZ DOMENE**  
**Deputy Ministry of Equality and Social Policies**  
**Regional Government of Andalusia**

# 1. ELECTRONIC SINGLE SOCIAL RECORD OF ANDALUSIA (ESSR)

## 1.1 CONCEPTUAL DEFINITION OF THE ELECTRONIC SINGLE SOCIAL RECORD OF ANDALUSIA (ESSR)

The concept of knowledge and use of the intellectual capital of its employees are underway and are significantly impacting organisations<sup>1</sup>. The progress of the ESR is consistent with this evolutionary process experienced by social services organisations dependent upon a strategy of knowledge management as an important organisational asset. In our case, as well as what is occurring in health management<sup>2</sup>, a shift is taking place in the Andalusian administration of social services from a **traditional organisation** based in paper records, to a **horizontal organisation** (i-social) with independent computerised processes<sup>3,4</sup>, towards a **knowledge organisation** (e-social) with computerised processes, shared and interoperable in the cloud. Furthermore, for a few years, this change has been subject to an exponential growth that has entered a very rapidly ascending segment, subjecting the organisation to ever faster continuous updating and learning (fig. 1).

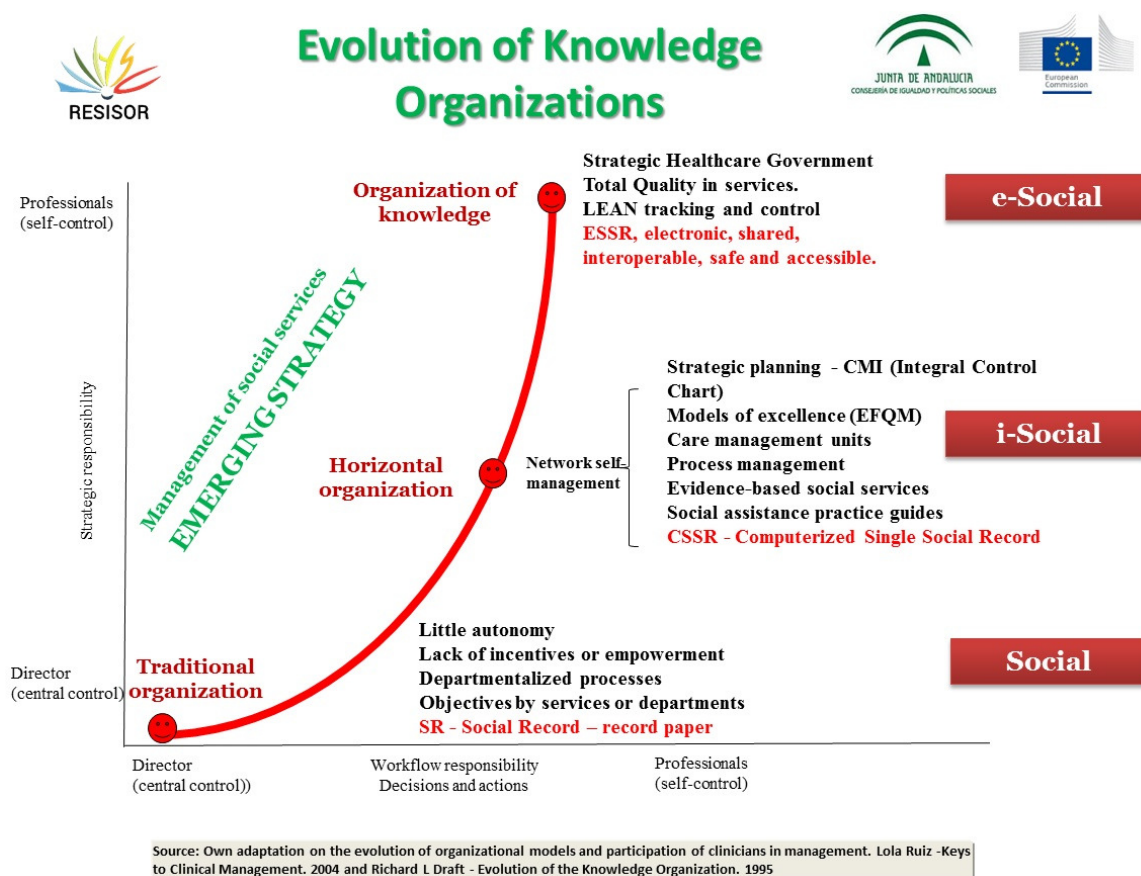


Fig. 1. Evolution of organisational models and continuous improvement in Social Services organisations<sup>5</sup> (Own adaptation).

<sup>1</sup> GOBIERNO VASCO. Gestión del conocimiento y capital intelectual. Departamento de justicia, trabajo y seguridad social. CIDEA. Colección: cuadernos de trabajo. SAN SEBASTIAN. 2000. N31. URL: <http://www.cidec.net/cidec/pub/archivos/31.pdf>

<sup>2</sup> RUIZ L, ALVAREZ F, ARTÉS A, BISBE J, CHIARRI JM, CUENCA S, DÍAZ AB, GARCÍA CE, JONES R, MARTINEZ DEL CERRO FJ, MONTEAGUDO JL, OSET J, PANIAGUA JL, ROMERO A, SÁNCHEZ J, SEGURA M, VARGAS G. Claves para la Gestión Clínica. Ed. McGraw-Hill/interamericana de España - SAU. MADRID. 2004. URL: <https://es.scribd.com/doc/165801360/Claves-para-la-gestion-clinica-Dra-Lola-Ruiz-Iglesias>

<sup>3</sup> GARCIA FILOSO A, CRESPO A, ROS MD, PONS E, AGUDO S, ACOSTA J, SOLER G, ARROYO J, ALMENARA J, ALONSO TRUJILLO F. Computer Science Application for Centres of Disabled people - AID. Encuentro Internacional de los avances tecnológicos en apoyo de las personas con discapacidad y la tercera edad. VALIDAL'96 (Stand CDTI). Tecnivalia y Telefónica de España. MADRID. 15-16 junio de 1996. DOI: 10.13140 / 2.1.3369.6965

<sup>4</sup> ALONSO TRUJILLO F. Development of a Health database for Mental Retardation. Experience of AID in Spain. 6th International Workshop on Assessment and Burden of Mental Disabilities: The MEROPE Project. BIOMED Programme. Universidad de Cádiz y PROMI. JEREZ DE LA FRONTERA. 5-6 de mayo de 2000. DOI: 10.13140 / 2.1.5124.8647

<sup>5</sup> RUIZ IGLESIAS L. Claves para la gestión clínica. Cátedra Pfizer de gestión Clínica. Mc Graw Hill. MADRID. 2004.

<sup>6</sup> DAFT RL. Organization Theory and Design. West Publishing Company. SAINT PAUL, MINNESOTA. 1995.

The **Social Services Law of Andalusia** emphasises the necessary coordination among the different levels of social services, and subsequently with the health services, in order to provide better citizen services<sup>7</sup>. The interoperability of the social and health information systems will make the coordination between both services possible, which will allow, in general, advances in a more comprehensive and continued service for the users, speeding up management and optimising public resources. In this respect, the Information and Communications Technologies are essential tools in order to increase the efficiency of the social services and increase accessibility<sup>8</sup> and proximity to users, facilitating a change towards a more effective coordination between social and healthcare professionals<sup>9</sup>. Therefore, it is in this coordination model between the health and social services where the development of an ESSR takes on a special interest.

- The **RECORD** is a data registry of persons subject to professional intervention. As any other generic format it is subject to be used for various disciplines<sup>10</sup>.
- The **SOCIAL RECORD (SR)** is the basic documentary record of the user and their family that is used by social work professionals that work in social services. It is the set of files, in any format, that contains data, assessments and information of a diverse nature about the situation and evolution of a user or family group throughout a process or integration.
- The **SINGLE SOCIAL RECORD (SSR)** is that record which is implemented in a consensual manner as a common model in a specific area of social services. It contains all relevant data associated with the set of social interventions that a person or their nuclear family require throughout their lives and should be a dynamic work tool that not only integrates the social knowledge on a person, but is also consolidated as a basic instrument for diagnostics and the most suitable Social Integration Project (SIP).
- The **ELECTRONIC SINGLE SOCIAL RECORD (ESSR)** is the computerised, digitalised, virtualised and interoperable single social record. It would be a key tool for the planning and management of services which, through its records and information, enables the recognition of its efficiency and social reality in which it is integrated. Furthermore, this interoperability is considered with other social protection systems: education, employment, housing, etc.

## 1.2 LEGAL GROUNDS AND REGULATORY FRAMEWORK.

Article 39 of the **Spanish Constitution**<sup>11</sup> of 1978 establishes the governing principles of social and economic policy and reminds us that the public authorities ensure the social protection of families. Articles **23.1** and **61 of the Statute of the Autonomy of Andalusia, dedicated to social benefits**, establish the guaranteed right of all persons to equally access social benefits of a public system of social services and a **basic income** which ensures respectable living conditions (Art. 23.2).

**Law 9/2016, of 27 December, of Social Services of Andalusia**<sup>12</sup>, replaces the Law 2/1988 of 4 April, which in its time was responsible for configuring a “*Public Social Services System*” in the Autonomous Community of Andalusia<sup>13</sup>. Law 9/2016 proposes to promote and guarantee in the Autonomous Community the **universal right** of all persons to benefits and services of the Public Social Services System and contemplates and reinforces both the

<sup>7</sup> Ley 9/2016, de 27 de diciembre, de Servicios Sociales de Andalucía.

<sup>8</sup> **MORENO L, MARTÍNEZ P, GONZÁLEZ Y.** Guía para elaborar Documentación Digital Accesible. Recomendaciones para Word, PowerPoint y Excel de Microsoft Office 2010. Tecnología y Sociedad Vol. 5, CENTAC 2014. URL: [https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwi39ryWz8nKAhUGfhoKHfDOBfsQFggfMAA&url=http%3A%2F2Focw.uc3m.es%2Frecursos%2FGuia-Accesibilidad-Documentacion-Digital.pdf&usq=AFOjCNHfJca0i6HtSB7mPax5kXjOrs02zw&sig2=v9Fz7MH\\_MDrmczWh4TqsO&bvm=bv.112766941.d.ZWU](https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwi39ryWz8nKAhUGfhoKHfDOBfsQFggfMAA&url=http%3A%2F2Focw.uc3m.es%2Frecursos%2FGuia-Accesibilidad-Documentacion-Digital.pdf&usq=AFOjCNHfJca0i6HtSB7mPax5kXjOrs02zw&sig2=v9Fz7MH_MDrmczWh4TqsO&bvm=bv.112766941.d.ZWU)

<sup>9</sup> **MARTÍNEZ DOMENE M.** El modelo Andaluz de coordinación sociosanitaria. Jornadas sobre la coordinación entre los sistemas públicos de salud y servicios sociales desde la atención en los servicios de urgencia. SEVILLA. 5/11/2015. En: Colegio Oficial de Diplomados en Trabajo Social y AA.SS. de Sevilla. Actas de las II Jornadas Provinciales del Colegio Profesional de los trabajadores sociales de Sevilla. 2016: 15-24. URL: [http://www.cgtrabajosocial.es/app/webroot/files/consejo/files/Actas%20II%20Jornadas%20Coord%20%20Sociosanitaria%20\(1\).pdf](http://www.cgtrabajosocial.es/app/webroot/files/consejo/files/Actas%20II%20Jornadas%20Coord%20%20Sociosanitaria%20(1).pdf)

<sup>10</sup> **GARCÍA T.** La Historia social como instrumento documental básico. La atención al ciudadano en los Servicios Sociales. Comunicaciones de la mesa redonda: homogeneización de instrumentos, prestaciones y recursos sociales. MADRID. 1996;4,1:139-146. URL: <https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwigv9q9rPKAhUEXROKHg4BfsQFggfMAA&url=http%3A%2F2Fwww.madrid.es%2FUnidadesDescentralizadas%2FServALaCiudadania%2FSSociales%2FPublicaciones%2FCriteriosOrganizativosParaMejora%2FTrabSocialZona04.pdf&usq=AFOjCNHfJrRD7v2l-rpweiYrPnFX8to5xA&sig2=nIGPpyzUNfNErrxiiPfkG&cad=rja>

<sup>11</sup> **CONSTITUCIÓN ESPAÑOLA.** BOE 311, 29 de diciembre de 1978 (29313 -29424). URL: <https://www.boe.es/buscar/doc.php?id=BOE-A-1978-31229>

<sup>12</sup> Ley 9/2016, de 27 de diciembre, de Servicios Sociales de Andalucía.

<sup>13</sup> Ley 2/1988, de 4 de abril, de Servicios Sociales de Andalucía. BOJA 29 de 12/4/1988. URL: <http://untadeandalucia.es/boja/1988/29/1>



rights established a posteriori and those implemented with **Law 39/2006, of 14 December, on the promotion of personal autonomy and assistance for people in situations of dependency**<sup>14</sup>. It is a law for **equality** that consolidates the principle that the access to social services is universal, reinforcing the Public System of Social Services such as the **Cooperation network of entities, services and centres**, creating a **Catalogue of Social Services Benefits**, which includes guaranteed benefits such as new subjective rights of the population, a **Strategic Social Services Plan** and a **Map of Social Services**<sup>15, 16</sup>. It consolidates and improves the functional and territorial structure of the Public System of Social Services of Andalusia (PSSSA), it confirms the **Community Social Services (CSS)** as an entry point and fundamental piece of the System, it defines a **Basic Model of Intervention** and it establishes the **Social Intervention Project (SIP)** as an action designed to guarantee the comprehensive character of the care and its continuity, in accordance with the diagnostic assessment of the needs. For all those reasons, the **Social Card**<sup>17</sup> and the **digital Social Record** were established as essential elements for the management of the PSSSA. Additionally, according to Art. 50 of the Law 9/2016, it corresponds to the competent Regional Ministry in matters of social services to create and develop **coordination protocols** with other systems of social protection that may converge with the PSSSA<sup>18</sup>. This must be kept in mind for the **telematics procedures for sharing personal data and specific information** of the population that is generated in the different administrations.

On the other hand, Article 9.3 of the **Law 5/2010, of 11 June, on Local Autonomy of Andalusia**<sup>19</sup> establishes the management of Community Social Services as own municipal competencies, in accordance with the **Regional Map and Plan of Social Services of Andalusia**<sup>20</sup>.

El **Ministry of Health, Social Services and Equality** has envisaged in the draft of **Health and Safety Care Strategy** that the social and health services of the Autonomous Communities will share the social and clinical information of the users of both systems in a single **integrated socio-health record**. For this to be possible in Andalusia, it is necessary that first the **Electronic Single Social Record** is created, given that in the public health system, the **Electronic Medical Record (DIRAYA)** was implemented years ago. The DIRAYA system takes into account a **summarised social record module** in which data are collected relating to the composition of a family group and relations among its members. It offers the possibility to do a familial genogram and identify social risk factors via the application of a specific measuring instrument designed and validated by the Andalusian Health Service (AHS). It identifies and collects the demand presented, the diagnosis of the problem and the plan of intervention to be carried out. It also offers the possibility of collecting data from the social record in order to issue a **basic social report**. All of this should be kept in mind during the future development of the ESSR, after the EU RESISOR Project ends, with the goal of sharing information in real time<sup>21</sup>.

### 1.3 ETHICAL AND CONFIDENTIALITY IMPLICATIONS

The ESSR will collect all types of data of a sensitive nature from the user in the social, health, judicial and economic areas, among others. Therefore, it must have all of the necessary mechanisms in order to ensure compliance with the regulations regarding **intimacy, confidentiality and data protection**, keeping in mind that the personal data to be

<sup>14</sup> Ley 39/2006, de 14 de diciembre, de promoción de la autonomía personal y atención a las personas en situación de dependencia. URL: <https://boe.es/boe/dias/2006/12/15/pdfs/A44142-44156.pdf>

<sup>15</sup> CIPS. Mapa de Servicios Sociales de Andalucía. 2018. URL: <https://www.serviciosocialesandalucia.es/mapa-servicios-sociales>

<sup>16</sup> RAMÍREZ JM, JIMÉNEZ S, ALONSO-TRUJILLO F. Mapa de Servicios Sociales en Andalucía: una herramienta innovadora para la región (The digital map of social services in Andalusia: an innovative tool for the region). Workshop. 26<sup>th</sup> European Social Services Conference - ESN. Invest, innovate and transform - Empowering people and Communities. SEVILLA. 28-30 mayo de 2018. URL: [https://www.researchgate.net/publication/325661624\\_MapadeServiciosSocialesenAndalusiaunaherramientainnovadora para la region](https://www.researchgate.net/publication/325661624_MapadeServiciosSocialesenAndalusiaunaherramientainnovadora para la region)

<sup>17</sup> GARCÍA MAROTO D. Llega la Tarjeta Social Universal, ¿el DNI de los pobres? El independiente. 8/04/2018. URL: <https://www.elindependiente.com/economia/2018/04/08/la-tarjeta-social-universal-ya-esta-aqui-el-dni-de-los-pobres-o-una-mejora-social/>

<sup>18</sup> CASTRO ARGÜELLES MA. La nueva ley de servicios sociales de Andalucía: una presentación. Foro, Nueva época. 2016;19(2):313-333. URL: <http://dx.doi.org/10.5209/FORO.55376>

<sup>19</sup> Ley 5/2010, de 11 de junio, de Autonomía Local de Andalucía. BOJA 122 de 23/06/2010. URL: <http://juntadeandalucia.es/boja/2010/122/1>

<sup>20</sup> PRESIDENCIA JUNTA DE ANDALUCÍA. La Junta pone en marcha un Mapa de Servicios Sociales con información de recursos. Noticias Junta. 25/05/2018. URL: <http://portavoz.cpre.junta-andalucia.es/presidencia/portavoz/sociedad/133082/mapa/serviciosociales/igualdad/app/aplicacion/acceso>

<sup>21</sup> SAS. DIRAYA. 2018. URL: <http://repositorio.i-administracion.junta-andalucia.es/repositorio/usuario/listado/fichacompleta.jsf?idProyecto=626>

treated will be **very sensitive**, being subject to the **highest protection** when it comes to their **access, rectification, erasure, abolition, restriction, portability and objection**.

The regulatory framework regarding ethics, confidentiality and the consequences of malpractice as it applies to the ESSR<sup>22, 23</sup> is shown in Table 1.

**Table 1 - Regulatory framework regarding the ethics and confidentiality of the ESSR.**

<ul style="list-style-type: none"> <li>• Constitución Española (artículo 18 y artículo 105).</li> <li>• Convenio Europeo de Derechos Humanos (Artículo 8).</li> <li>• Ley de Enjuiciamiento Criminal (Artículos 262-263).</li> <li>• Real Decreto 428/1993, de 26 de marzo, por el que se aprueba el Estatuto de la Agencia de Protección de Datos.</li> <li>• Orden de 2 de febrero de 1995 por la que se aprueba la primera relación de países con protección de datos de carácter personal equiparable a la española, a efectos de transferencia internacional de datos.</li> <li>• Directiva 95/46/CE del Parlamento Europeo y del Consejo, de 24 de octubre.</li> <li>• Código Penal vigente de LO 10/1995, de 23 de noviembre, modificado por LO 1/2015 de 30 de marzo (Artículos 197-201).</li> <li>• Instrucción 1/1998, de 19 de enero, de la Agencia de Protección de Datos, relativa al ejercicio de los derechos de acceso, rectificación y cancelación.</li> <li>• Ley Orgánica de 15/1999 de Protección de Datos de Carácter Personal (LOPD).</li> <li>• Instrucción 1/2000, de 1 de diciembre, de la Agencia de Protección de Datos, relativa a las normas por las que se rigen los movimientos internacionales de datos.</li> <li>• Ley Orgánica 4/2000, de 11 de enero, sobre derechos y libertades de los extranjeros en España y su integración social.</li> <li>• Resolución de 22 de junio de 2001, de la Subsecretaría, por la que se dispone la publicación del Acuerdo de Consejo de Ministros por el que se concreta el plazo para la implantación de medidas de seguridad de nivel alto en determinados sistemas de información</li> <li>• Ley 41/2002, de 14 de noviembre, básica reguladora de la autonomía del paciente y de derechos y obligaciones en materia de información y documentación clínica (Art.3 y 14).</li> <li>• Ley 58/2003, de 17 de diciembre, General Tributaria.</li> <li>• Ley 59/2003, de 19 de diciembre, de firma electrónica.</li> <li>• Ley Orgánica 1/2004, de 28 de diciembre, de Medidas de Protección Integral contra la Violencia de Género.</li> <li>• Resolución de 1 de septiembre de 2006, de la Agencia Española de Protección de Datos, por la que se determina la información que contiene el Catálogo de ficheros inscritos en el Registro General de Protección de Datos.</li> <li>• Resolución de 12 de julio de 2006, de la Agencia Española de Protección de Datos, por la que se crea el Registro Telemático de la Agencia Española de Protección de Datos.</li> <li>• Resolución de 12 de julio de 2006, de la Agencia Española de Protección de Datos, por la que se aprueban los formularios electrónicos a través de los que deberán efectuarse las solicitudes de inscripción de ficheros en el Registro General de Protección de Datos, así como los formatos y requerimientos a los que deben ajustarse las notificaciones remitidas en soporte informático o telemático.</li> <li>• Ley 39/2006, de 14 de diciembre, de Promoción de la autonomía personal y atención a las personas en situación de dependencia.</li> <li>• Ley 25/2007, de 18 de octubre, de conservación de datos relativos a las comunicaciones electrónicas y a las redes públicas de comunicaciones</li> <li>• Real Decreto 1720/2007, de 21 de diciembre por el que se aprueba el Reglamento de desarrollo de la LOPD.</li> <li>• Ley 54/2007, de 28 de diciembre, de Adopción internacional.</li> <li>• Resolución de 18 de marzo de 2010, de la Agencia Española de Protección de Datos, por la que se crea la Sede Electrónica de la Agencia Española de Protección de Datos.</li> <li>• Resolución de 24 de mayo de 2010, de la Agencia Española de Protección de Datos, por la que se regula el Registro Electrónico de la Agencia Española de Protección de Datos.</li> <li>• Ley 18/2011, de 5 de julio, reguladora del uso de las tecnologías de la información y la comunicación en la Administración de Justicia.</li> <li>• Ley 26/2011, de 1 de agosto, de adaptación normativa a la Convención Internacional sobre los Derechos de las Personas con Discapacidad.</li> <li>• Ley 19/2013, de 9 de diciembre, de transparencia, acceso a la información pública y buen gobierno.</li> <li>• Ley 9/2014, de 9 de mayo, General de Telecomunicaciones.</li> <li>• Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas. (Artículos 13, 17, 28, 40).</li> <li>• Ley 40/2015, de 1 de octubre, de Régimen Jurídico del Sector Público.</li> <li>• Ley 9/2016, de 27 de diciembre, de Servicios Sociales de Andalucía.</li> <li>• Reglamento (UE) 2016/679 del Parlamento Europeo y del Consejo, de 27 de abril de 2016, relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos y por el que se deroga la Directiva 95/46/CE (Reglamento general de protección de datos)</li> </ul>
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Prior to 1981, the European Council adopted the only binding international document in matters of data protection, **Convention 108**. As of 25 May 2018, with the entry into force of the General Data Protection Regulation (GDPR) of 2016<sup>24</sup>, there is one singular set of data protection regulations for all entities and companies that operate within the European Union (EU)<sup>25</sup>, regardless of where they may have their headquarters. The strictest regulations in matters of

<sup>22</sup> **BELTRÁN AGUIRRE JL.** La Protección de los Datos Personales relacionados con la Salud. Ponencia del Asesor jefe del Defensor del Pueblo de Navarra. PAMPLONA. 2012. URL: <https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjogjsovnKAhXKtBoKHcCGB60QFggiMAA&url=http%3A%2F2Fwww.navarra.es%2FNR%2Frdonlyres%2F517A4434-9C3B-442E-8651-61A7AE0490AD%2F226320%2Fpdps.pdf&usq=AFOjCnF-LmgQJOAYAgx6dEcGvPvcZbETWO&sig2=axaCB3I8GI3AeZAbO6h6Sw>

<sup>23</sup> **JIMÉNEZ GARCÍA S.** Códigos electrónicos Protección de Datos de Carácter Personal Selección y ordenación. Agencia Estatal Boletín Oficial del Estado. Edición actualizada a 15 de junio de 2018. URL: [https://www.boe.es/legislacion/codigos/codigo.php?id=055\\_Proteccion\\_de\\_Datos\\_de\\_Caracter\\_Personal&modo=1](https://www.boe.es/legislacion/codigos/codigo.php?id=055_Proteccion_de_Datos_de_Caracter_Personal&modo=1)

<sup>24</sup> **COMISIÓN EUROPEA.** Reglamento (UE) 2016/679 del Parlamento Europeo y del Consejo de 27 de abril de 2016 relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos y por el que se deroga la Directiva 95/46/CE (Reglamento general de protección de datos). Diario Oficial de la Unión Europea. L 119/1 - 4.5.2016.

<sup>25</sup> **COMISIÓN EUROPEA.** Reforma de 2018 de las normas de protección de datos de la UE. 2018. URL: [https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules\\_es](https://ec.europa.eu/commission/priorities/justice-and-fundamental-rights/data-protection/2018-reform-eu-data-protection-rules_es)

data protection imply that people have more control over their personal data and that companies benefit equally<sup>26</sup>. The new regulations increase the guarantees in the treatment of data and introduce new forms of protection such as the right to be forgotten or the right to share one's personal data. Measures that reinforce one's capacity to control the information shared with third parties<sup>27, 28, 29</sup>.

The Organic Law on Data Protection (LOPD) establishes principles for the treatment of sensitive data that have been extended at present with the GDPR<sup>30</sup>: **proportionality, transparency, accuracy of the data, portability** of transmission, **privacy by design and by default, confidentiality and security in the treatment**, application of **pseudonymization, erasure or restriction** of unnecessary data (right to be forgotten).

All organisations that possess personal data of third parties must have a **person in charge or a designated data protection officer**. The holding entity of the data must notify the authorities in the event of noncompliance.

### 1.3.1. ETHICAL PRINCIPLES

From an ethical perspective, within the framework of reference regarding the **dignity of the person and human rights**, the principles of **autonomy and benefits** must be respected, which govern the social and health relation - in the use, access, care and storage of the records - provided that the principles of **do no harm** and **justice** have first been duly complied with<sup>31</sup>.

### 1.3.2. REPERCUSSIONS IN THE PROFESSIONAL SPHERE.

Given that the ESSR is configured as an instrument fundamentally designed to guarantee proper social care for users of the social services, competent professionals that are working in the process of personal social care will have access to it. As a result, every executive centre has to establish the methods that make access to the ESSR by professionals possible at all times.

Furthermore, Article 10 of the LOPD establishes that the person responsible for the database, and those who intervene in any stage of data processing are bound by **professional secrecy** regarding the same and **must keep them**. These obligations remain even after their relations with the holder of the database, or the person responsible for the same, have ended<sup>32</sup>. Similarly, Article 2.7 of the Law 41/2002 on basic regulation of patient autonomy and of rights and obligations in terms of information and clinical documentation establishes that "*the person that creates or has access to the information and clinical documentation is bound to maintain due confidentiality*".

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<sup>26</sup> COMISIÓN EUROPEA. Reforma de la protección de datos de la UE: mejores derechos de protección de los datos para los ciudadanos europeos. BRUSELAS. Mayo 2018. URL: [https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-citizens\\_es.pdf](https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-citizens_es.pdf)

<sup>27</sup> COMISIÓN EUROPEA. Siete pasos para que las empresas se preparen para el Reglamento general de protección de datos (RGPD). Luxemburgo: Oficina de Publicaciones de la Unión Europea, 2018. URL: [https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-business-7-steps\\_es.pdf](https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-business-7-steps_es.pdf)

<sup>28</sup> COMISIÓN EUROPEA. EU Data Protection Reform: next steps. Oficina de Publicaciones de la Unión Europea, Enero 2018. URL: [https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-next-steps\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-next-steps_en.pdf)

<sup>29</sup> COMISIÓN EUROPEA. EU Data Protection Reform: ensuring its enforcement. Oficina de Publicaciones de la Unión Europea, Enero 2018. URL: [https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-role-edpb\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-role-edpb_en.pdf)

<sup>30</sup> COMISIÓN EUROPEA. Son sus datos, ¡tome el control!. Guía para los ciudadanos sobre la protección de datos en la UE. Luxemburgo: Oficina de Publicaciones de la Unión Europea, 2018. URL: [https://ec.europa.eu/commission/sites/beta-political/files/data-protection-overview-citizens\\_es.pdf](https://ec.europa.eu/commission/sites/beta-political/files/data-protection-overview-citizens_es.pdf)

<sup>31</sup> DELGADO MARROQUÍN MT. Quiero que borre de mi historia el antecedente de aborto. En: *ALTISENT TROTA R. Serie: Cuestiones ético-legales en la consulta de medicina de familia*. Aten Primaria. 2005;36(6):339-43.

<sup>32</sup> SARRATO MARTÍNEZ L. El régimen legal de acceso a la historia clínica y sus garantías. REVISTA JURÍDICA DE CASTILLA Y LEÓN. 2009; 17 (ENERO); 177-215. URL: [http://www.trabajosocialvalladolid.org/documentos/circulares\\_32\\_1372059466.doc](http://www.trabajosocialvalladolid.org/documentos/circulares_32_1372059466.doc)

The duty of confidentiality is, from an ethical point of view, a condition for the action of professionals, services, institutions, etc. to be carried out excellently in the social services. Therefore, all of the services and professionals that take part in the social care of a user must have a **strong commitment of confidentiality**<sup>33</sup> to dissipate the anxiety and distrust that the population may have of digitalised information systems. In these cases, the employee that accesses data must indicate the reason for access and leave an **electronic trace or trail** for justification and follow-up.

### 1.3.3. REPERCUSSIONS FOR USERS

In the first stage of the treatment of data, personal autonomy is expressed in the right of the population to know and decide which data will be collected and registered.

The statement signed by the delegates of the *ESF Exploratory Workshop*, which was replicated by the Organisation for Economic Co-operation and Development (OECD) in the documentation of the *US National Science Foundation on Smarter Health*<sup>34</sup> working group, called for the drafting of a **Charter of Rights** in matters of electronic registers in care and service systems that affect social services, recognising the following rights:

- Access of users not only includes access to recorded historical data, but also the dynamic data, such as service hours.
- Ability to express and register their own view points and preferences.
- Ability to register observations about their own health, operation and needs.
- To decide personal directions on the individualized rules for the exchange of information to third parties, both formal and informal, who participate in their care.
- And the expression of the rights of their representatives and the agents they have appointed.

In fact, this statement has echoed a prior judgement of the **European Group on Ethics in Science and New Technologies (EGE) of the European Commission** about the necessity for a **European Charter of Patients** that includes ethical issues set out by the Information and Communication Technologies in health care<sup>35</sup>, which currently extends to the coordination of the provision of health and social care.

The Spanish regulatory framework understands that the ownership of the private information belongs to the user, and that the disclosure to other persons must, prior to the same, be specific regarding the contents to be disclosed, and must have the **free, expressed and unequivocal consent** of the user<sup>36</sup>.

### 1.3.4. PROTECTION MECHANISMS.

To increase security, control, disidentification, invisibility or anonymisation and detection of malicious information use or malpractice<sup>37</sup> systems must be in place. It is misleading to talk about **unenforceable anonymisation**: the risk of reidentification is a matter of probabilities, and although the risk is never zero, it can be extremely low. Furthermore,

<sup>33</sup> GOIKOETXEA ITURREGUI M. La Confidencialidad en Servicios Sociales. Serie ética y Servicios Sociales. Grupo promotor del comité de ética en intervención social del Principado de Asturias. Consejería de Bienestar Social y Vivienda. 2013. URL: [https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwie1N3qlvLKAhWCOxokHbxADMOfggfMA&url=http%3A%2F%2Fwww.asturias.es%2F Asturias%2Fdescargas%2FPDF\\_TEMAS%2FAsuntos%2520Sociales%2FCalidad%2Fguia\\_confidencialidad\\_A4.pdf&usq=AFOjCNGXU01pLgewHGscJpw7THRiXYOv1g&sig2=H0bp2GN\\_sNZRPB\\_dCAWxjg&bvm=bv.114195076.d.bGQ](https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwie1N3qlvLKAhWCOxokHbxADMOfggfMA&url=http%3A%2F%2Fwww.asturias.es%2F Asturias%2Fdescargas%2FPDF_TEMAS%2FAsuntos%2520Sociales%2FCalidad%2Fguia_confidencialidad_A4.pdf&usq=AFOjCNGXU01pLgewHGscJpw7THRiXYOv1g&sig2=H0bp2GN_sNZRPB_dCAWxjg&bvm=bv.114195076.d.bGQ)

<sup>34</sup> OCDE-US: NATIONAL SCIENCE FOUNDATION ON SMARTER HEALTH. OECD-NSF Workshop: Building a Smarter Health and Wellness Future 2011. URL: [www.oecd.org/sti/smarterhealth](http://www.oecd.org/sti/smarterhealth)

<sup>35</sup> WAGNER I (Rapporteur). Opinion of the European Group on Ethics in Science and New Technologies to the European Commission: Ethical Issues of Healthcare in the Information Society. Bureau of European Policy Advisers, Brussels. 1999. URL: [http://ec.europa.eu/bepa/european-groupethics/docs/avis13\\_en.pdf](http://ec.europa.eu/bepa/european-groupethics/docs/avis13_en.pdf)

<sup>36</sup> PUÑAL ROMARÍS ME. El consentimiento informado en servicios sociales desde la óptica del Trabajo Social: aplicación de la normativa de protección de datos. EU Trabajo Social. Universidad de Santiago de Compostela. Circular 32. SANTIAGO DE COMPOSTELA. 2010. URL: [https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwieg5v3mPzKAhVKDxoKHUd-DZgOFggmMAE&url=http%3A%2F%2Fwww.trabajosocialvalladolid.org%2Fdocumentos%2FCirculares\\_32\\_1372059466.doc&usq=AFOjCNHV5YyXPpVZBFfi4PhhUx0ZCD0PFA&sig2=CtUJarq9tg2jxklgYvEVXaw&bvm=bv.114195076.d.bGQ](https://www.google.es/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwieg5v3mPzKAhVKDxoKHUd-DZgOFggmMAE&url=http%3A%2F%2Fwww.trabajosocialvalladolid.org%2Fdocumentos%2FCirculares_32_1372059466.doc&usq=AFOjCNHV5YyXPpVZBFfi4PhhUx0ZCD0PFA&sig2=CtUJarq9tg2jxklgYvEVXaw&bvm=bv.114195076.d.bGQ)

<sup>37</sup> RIGBY M (ed.). The Challenges of Developing Social Care Informatics as an Essential Part of Holistic Health Care: Report of an ESF Exploratory Workshop held at Keele University, KEELE, UK. 21–23 July 2010.

just as in clinical studies, any research project that involves the reusing of socio-health data must have a favourable opinion of the **Research Ethics Committee**.

### 1.3.5. OWNERSHIP, CUSTODY AND TUTELAGE OF THE RECORDS.

A specific problem that may arise in the shared or integrated service is the ownership of the records. In our case, the Regional Government of Andalusia would be responsible for the custody of all records and ESSR system will identify in a personalized way the professionals who try to access it, collecting the date and time, the professional who accessed it, what part of the record they consulted, or if they were denied access. Similarly, the procedures of consent, delegation, representation, coordination, governance, authentication, management and sustainability must be regulated<sup>38</sup>.

## 2. JUSTIFICATION

### 2.1 BACKGROUND OF THE INFORMATION SYSTEMS OF THE SOCIAL SERVICES OF ANDALUSIA.

The first work package of the RESISOR project involved carrying out a **study of the state of the art** regarding the ESSR and of the **management of procedures and entities situation** of the social services that could have a role or be affected in the development and implementation of the ESSR in Andalusia.

To coordinate the work, it was divided in different parallel and correlated tasks with **focused working groups** for each one, which allowed for different **specific reports** to be generated (See work scheme in Fig. 2).

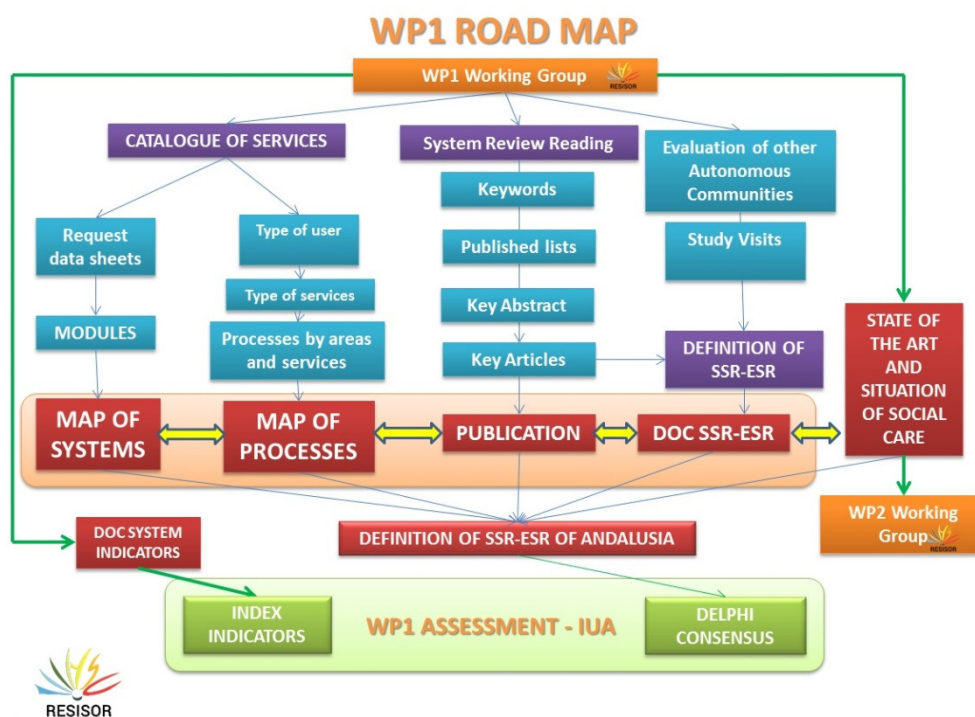


Fig. 2. Roadmap of the WP1 working group. Correlation of tasks and anticipated deliveries.

The first multidisciplinary working group was organised and completed the **bibliographical review** through an intentional internet search and the use of keywords and descriptors in standardised national and international documental databases. Specifically, the document provides a bibliographic review of possible proposals or concerns about holistic or integrated HSE models shared with EMR, as well as their possible impact on the functioning, cost

<sup>38</sup> DRAPER R, RIGBY M (eds). Towards an Ethical Protocol for Mental Health Informatics – A Synopsis of an International Conference, Dublin, 12 June 1997. Hospitaller Order of St John of God, Stillorgan, County Dublin. 1997.

and quality of Social Services management<sup>39</sup>, both in Spain and internationally, making special reference to the correlations that should be taken into account with other information systems, as well as with the technological advances that we must contemplate and integrate in their development. The bibliographical review allowed us to localise a limited number of impactful publications on this matter and grey literature of other experiences on the internet<sup>40</sup>.

It was confirmed that there are very few experiences with implementing the ESSR on the national level and of a complete region, including universally the population that lives there. What we have noticed as usual experiences are local or regional experiences limited in the space, given that in many European regions the social sector is clearly of local responsibility and is frequently integrating those services with health services. There are also ESSR systems implemented and published, such as a module of the Socio-health Record generated by the entity in charge, which is usually a City Hall or an equivalent body to the provincial Councils.

The implementation of the ESSR is normally carried out by public entities without normally publishing the research or innovation actions that are done in the development of their policies in specialists journals of impact. The private entities and companies that work in this field also avoid the publication of their results and the components of the systems that are implemented, like the ESSR, to avoid plagiarism and competition.

The **bibliographical review** document was agreed upon by means of a telematics survey carried out using the Delphi methodology<sup>41, 42</sup>. The final document obtained a high level of consensus in the first round of the Delphi procedure (n: 64)<sup>43</sup>.

A second working group drafted different versions of the **document for defining the ESSR**<sup>44</sup>. The document was agreed upon by means of a telematics survey carried out using the Delphi methodology (n: 64)<sup>45</sup>.

Another of the multidisciplinary working groups worked on the compiling of a standardised file of all the information systems with which the RMESP works in order to create the corresponding **information systems map** report<sup>46</sup>. An information system (IS) is a set of elements oriented for the treatment and administration of data and information, organised and ready for their later use, generated to meet a need or objective<sup>47</sup>. Information systems are a combination of three main parts: people, business processes and information technology equipment. An information system must comply with the following basic components interacting with each other<sup>48</sup>:

- Hardware, physical equipment used for processing and storing data,
- Software and the procedures used for transforming and extracting information,
- Data that represent the activities of the entity,
- The network that permits computers and devices to share resources,

<sup>39</sup> KEYHANI S, HEBERT P, ROSS J, FEDERMAN A, ZHU C, SIU A. Electronic health record components and the quality of care Medical Care 2008;46:1267-1272. URL: <http://www.biblioteca.cochrane.com/BCPGetDocument.asp?SessionID=%206786298&DocumentID=GCS38-12>

<sup>40</sup> ALONSO TRUJILLO F, DE LA FUENTE ROBLES YM, GAVIRA SÁNCHEZ L, GONZÁLEZ MONTERO MC, MUÑOZ DE DIOS MD. Deriverable PT1-V01 – RESISOR - Revisión bibliográfica sistemática sobre la HSUe (2010-2016). Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>41</sup> LEÓN OG, MONTERO I. Métodos de Investigación en psicología y Educación (3ª edición). McGraw-Hill: Madrid. 2003.

<sup>42</sup> SÁNCHEZ PEDRAZA R, JARAMILLO GONZÁLEZ LE. Metodología de calificación y resumen de las opiniones dentro de consensos formales. Rev Colomb Psiquiatr. 2009; 38:777-85.

<sup>43</sup> ALONSO TRUJILLO F. Deriverable PT1-01 – RESISOR – Informe de consenso DELPHI de documentos de entrega. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>44</sup> ALONSO TRUJILLO F, CÁMARA JIMÉNEZ IM, DELGADO E, FERNÁNDEZ B, GONZÁLEZ DE LA HIGUERA R, JIMÉNEZ LÓPEZ S, JIMÉNEZ GONZÁLEZ S, LOZANO RODRÍGUEZ JM, PÉREZ VERDUGO M, RAMÓN GARCÍA T, RODRÍGUEZ HIGUERAS E, RODRÍGUEZ LÓPEZ JM, ROMERO BEDOYA C, VELASCO RIVAS A. Deriverable PT1-01 – Definición de la historia social única electrónica. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>45</sup> ALONSO TRUJILLO F. Deriverable PT1-01 – RESISOR – Informe de consenso DELPHI de documentos de entrega. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>46</sup> ACUÑA A, ALONSO TRUJILLO F, CÁMARA JIMÉNEZ IM, DORADO PÉREZ E, GARCÍA LEÓN R, GARCÍA ORDÓÑEZ R, GONZÁLEZ DE LA HIGUERA R, GUTIÉRREZ DE LA VEGA J, LORENTE GARCÍA JM, MARTÍNEZ GUERRERO MJ, MORÁN J, RODRÍGUEZ E, ROMERO BEDOYA C. Deriverable PT1-02 – Mapa y fichas de sistemas de información. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>47</sup> WIKIPEDIA. Sistemas de Información. 2016. URL: [https://es.wikipedia.org/wiki/Sistema\\_de\\_informaci%C3%B3n](https://es.wikipedia.org/wiki/Sistema_de_informaci%C3%B3n)

<sup>48</sup> SHAIKH AA, KARJALOUTO H. Making the most of information technology & systems usage: A literature review, framework and future research agenda. Computers in Human Behavior 2015; 49: 541–566. URL: <http://www.sciencedirect.com/science/article/pii/S0747563215002496>

- The persons that develop, maintain, and use the system.

For the drafting of this report, the members of the drafting group edited some **templates of model files**, for purposes of unifying and standardising the way information is collected in order to facilitate the subsequent analysis. These templates were sent to General Directorates, Service Headquarters and to the persons in charge of the dependent entities of the RMESP and those participated in the RESISOR Project and were later codified in a logical order.

For the preparation of the global map of processes, it was chosen to group them based on the different institutions and organisations involved in the management of social services in Andalusia, differentiating between the principal organisational areas involved.

The **systems map** document was also agreed upon by means of a telematics survey carried out using the Delphi methodology (n: 64)<sup>49</sup>. The final document received a high level of consensus in the first round of the Delphi procedure (fig. 3).

Furthermore, a working focus group was organised and was in charge of making the diagrams for all the processes of the various management areas of the RMESP, creating a report that contained all of the diagrams of each process and their correlation with the **map of global processes of the social services system in Andalusia**<sup>50</sup>.

For the drafting of this report, the members of the drafting group edited some templates of MODEL FILES, with the aim of unifying the information thus facilitating the subsequent analysis. They also created a quadrant of visits and a list of processes controlled by the persons in charge of the General Directorates, Service Headquarters and to the persons in charge of the dependent entities of the RMESP and the local and private entities of the project in the pilot stage. In order to facilitate the task of creating the files and to provide technical support, the companies participating in the project offered their technical collaboration. For the standard computerised elaboration of the process maps, it was decided to use the BIZAGI MODELER tool<sup>51</sup>.

The management analysis by organisational units resulted in a global diagram of social services as a whole and the inventory of processes, which may not be linked to a single management centre, but possibly to several organisational units, including different levels of competencies (local and autonomous). The macroprocesses are structured and classified in strategic, social care and structural processes. The subtypes of processes are economic, technical, of intervention or accommodation.

In the global illustration of the processes map in figure 4, additionally, an estimate is made for all interest groups, understood to be institutions, organisations and groups which are satisfied with the efficient development of the processes in the RMESP. These include both internal organisational units for the management of the social services and other external entities, and the population.

The systems map document was also agreed upon by means of a telematics survey carried out using the Delphi methodology (n: 64)<sup>52</sup> and it obtained a high level of consensus in the first round of the procedure.

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<sup>49</sup> **ALONSO TRUJILLO F.** Deriverable PT1-01 – RESISOR – Informe de consenso DELPHI de documentos de entrega. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>50</sup> **ACUÑA A, ALONSO TRUJILLO F, CÁMARA JIMÉNEZ IM, CASTAÑEDA FERNÁNDEZ M, GARCÍA ORDÓÑEZ R, GONZÁLEZ DE LA HIGUERA R, LOZANO RODRÍGUEZ JM, MOLINA GIL J, MORÁN J, NAVARRO ZAFRA JC, ROBERT DÍAZ-TRECHUELO M, RODRIGUEZ HIGUERAS E, ROMERO BEDOYA C, TAPIA RODRÍGUEZ M.** Deriverable PT1-02 – RESISOR - Mapa y fichas de procesos en servicios sociales. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>51</sup> **BIZAGI.** Bizagi process modeler. Guía de usuario. 2015. URL. <http://help.bizagi.com/processmodeler/es/>

<sup>52</sup> **ALONSO TRUJILLO F.** DERIVERABLE PT1-01 – RESISOR – Informe de consenso delphi de documentos de entrega. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. SEVILLA. 2016.

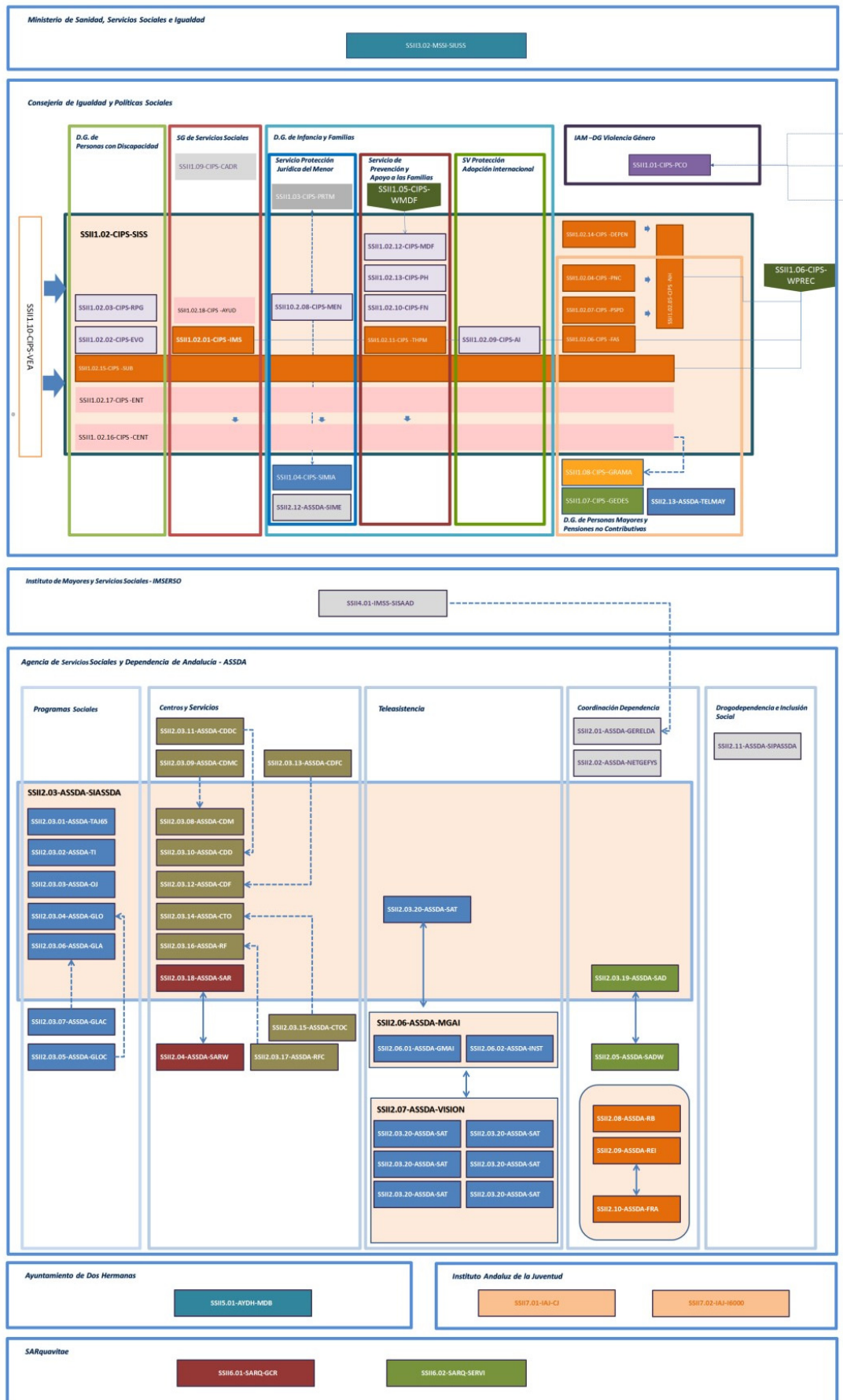


Fig. 3 - Global map of systems by body and type of social services.



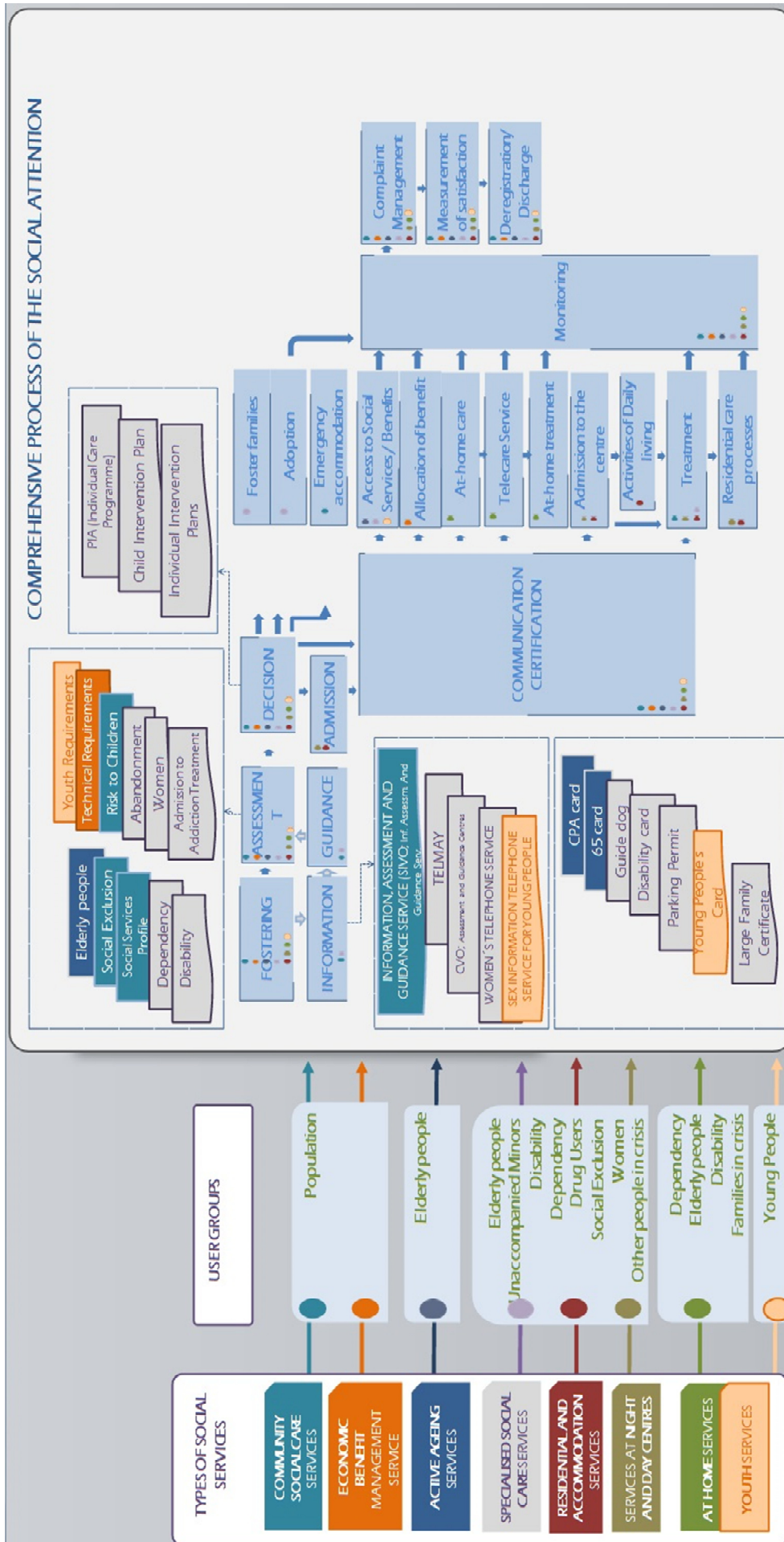


Fig. 4 - Global map of processes by type of social services and segments of users

In the case of the RESISOR P1 project, one of the most complicated issues to be decided was the **selection of the three systems or areas of the Social Services** which were to be integrated in the first stage of the ESSR for its piloting and validation. The selection was carried out by virtue of the greatest weight they had in the interest groups and different areas of system activity and the **corresponding report about the results of this analysis** was drafted, in which the responsibilities of each one of the partner entities in the WP3 of the project were detailed<sup>53</sup>. Finally, the three selected procedures were:

- Recognition of the situation of dependency and right to the benefits (elderly persons and persons with disabilities) (P1.06-TEC-DEP).
- Management of Day Centres and Residential Care.
- Assessment of the situation of a lack of protection by abandonment of children (PR1.04-TEC-DEP).

Just as prior work in the definition of the indicators that were going to be necessary for the monitoring and control<sup>54</sup>, for the RESISOR P1 Project and for the future versions of the ESSR a working group was created that in this WP1 drafted a first **report on the requirements of the monitoring indicators of the ESSR and the WP4 of the project**<sup>55</sup>.

Finally, with all of the information and documentation and with the results of the various reports and analyses, a drafting group created the **report of the state of the art and current situation of social care and the ESSR in Andalusia**<sup>56</sup> and an **executive report**<sup>57</sup> with an overall summary of the work carried out in the WP1.

## 2.2. PURPOSE AND CONTENTS OF THE ELECTRONIC SINGLE SOCIAL RECORD (ESSR) OF ANDALUSIA

### 2.2.1. PURPOSE OF THE ESSR OF ANDALUSIA.

The ESSR incorporates Information and Communications Technology (ICT) so that the registration of the information forms a part of an integrated and shared information system and helps with decision making<sup>58</sup>, increasing interoperability thanks to the codification and normalisation solutions<sup>59</sup>.

The purpose of the ESSR is to obtain a coordinated and comprehensive care for users of the social services of which the Regional Government of Andalusia is in charge, by means of the unification and continuous updating of the information and the simplification of the care procedures, moulding accessible and flexible services.

Additionally, the ESSR proposes the attainment of the following specific objectives in two fundamental areas:

#### Social Services:

- To ensure comprehensive social care for users and their families.
- To guide the processes of professional intervention.
- To achieve personalised monitoring, focused on the user and shared on behalf of the professionals.

<sup>53</sup> ALONSO TRUJILLO F, GARCÍA LEÓN R, JIMÉNEZ S, GARCÍA SÁEZ M. Deriverable PT1- 01 – RESISOR – Informe de selección de los 3 procedimientos a desarrollar. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>54</sup> GONZÁLEZ GÓMEZ L. La evaluación en la gestión de proyectos y programas de desarrollo: Una propuesta integradora en agentes, modelos y herramientas. Vitoria-Gasteiz: Eusko Jaurlaritzaren Argitalpen Zerbitzu Nagusia. Servicio Central de Publicaciones del Gobierno Vasco, 2005.

<sup>55</sup> ALONSO TRUJILLO F, JIMÉNEZ LÓPEZ S, MUÑOZ PEDROCHE UJ. Deriverable PT1-V01 – RESISOR - Indicadores de evaluación y seguimiento del proyecto RESISOR y de la HSUe. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>56</sup> ALONSO TRUJILLO F, GARCÍA SÁEZ M, RUIZ MD, RAMÍREZ CARTAGENA P. Deriverable PT1-01 – RESISOR - Situación actual y estado del arte de la historia social única electrónica en Andalucía. Resumen ejecutivo de las actuaciones y resultados del PT1. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>57</sup> ALONSO TRUJILLO F, GARCÍA SÁEZ M, RUIZ MD, RAMÍREZ CARTAGENA P. Deriverable PT1-01 – RESISOR - Situación actual y estado del arte de la historia social única electrónica en Andalucía. Resumen ejecutivo de las actuaciones y resultados del PT1. Consejería de Igualdad y Políticas Sociales. Junta de Andalucía. Sevilla. 2016.

<sup>58</sup> ROSHANOV P S et al. Features of effective computerized clinical decision support systems: meta-regression of 162 randomized trials. BMJ 2013; 346. URL: <http://www.bmj.com/content/346/bmj.f657>

<sup>59</sup> MONER CANO D. Estandarización de informes de alta hospitalarios con la norma ISO 13606. Grupo de Informática Biomédica del Instituto ITACA – Universidad Politécnica de Valencia. VALENCIA. 2008. URL: [http://www.ibime.upv.es/bie/images/documentos/alta13606\\_inforosalud08.pdf](http://www.ibime.upv.es/bie/images/documentos/alta13606_inforosalud08.pdf)

### Social management:

- To simplify the care procedures and to improve the coordination of the entities involved in the care of the social needs of each user.
- To offer greater flexibility in the care received by the user.
- To update data continuously and in real time.
- To advance in the complex process of digitally transforming the PSSSA.

Furthermore, to make it possible to use quality data to carry out **studies and research**.

### 2.2.2. CONTENTS OF THE ESSR OF ANDALUSIA.

The ESSR of a user of the Social Services will contain sufficient information in order to identify them and document their social intervention process (SIP).

In general, it will contain aspects related with their needs, the benefits they receive and the information available about the person to decide which resources should be assigned to them, with the purpose of meeting those needs and others that may be of use in order to find out their problems by virtue of a global biopsychosocial vision<sup>60, 61</sup>.

Specifically, it will contain additional classified information according to some areas of interest:

- **Reference details from their personal identification file:** number and opening date of the Social Record, identification details, registered address, social services professional of reference, origin/sent by, place of work, initial claim, documentation to be presented, housing details as a tenancy classification, living conditions, etc.
- **Domestic situation:** composition of the domestic unit, familial relations<sup>62</sup> etc.
- **Relationship with their environment:** social integration, leisure, etc.
- **Training-labour aspects:** education level, training level, professional capabilities and skills, and in the case of children: school situation, absenteeism.
- **Economic aspects:** sources of income, unemployment situation, etc.
- **Legal aspects:** penalties, legal situation, etc.
- **Health aspects:** healthcare coverage, Social Security affiliation information, dependency situation, disability, diseases, addictive behaviours, etc.
- **Processing information:** administrative situation and summary of all the proceedings, information on the monitoring of actions, benefits received from the catalogue of social services, etc.
- **Assessment:** of the individual and social needs of the person and of their domestic unit, scales and instruments of social assessment, etc.
- **Diagnostics.**
- **Social intervention project (SIP).** Monitoring and Assessment.
- **Monitoring:** results of the interventions.
- **Advance directives:** Evidence and accessibility via Internet of the Advance Directives, Prior Instructions, or Last Wishes (death at home, end-of-life de-medication, palliative care, dignified death, terminal sedation, euthanasia of some level, etc.)<sup>63</sup>
- **Evaluation:** adaptation of the interventions to the needs of the person, data aggregated for the macromanagement in healthcare planning (*data mining*)<sup>64</sup>, etc.

<sup>60</sup> DA COSTA CARBALLO CM. Otros documentos: la historia clínica. Documentación de las Ciencias de la Información. 1997; (20): 41-63. URL: <http://revistas.ucm.es/index.php/DCIN/article/viewFile/DCIN9797110041A/19782>

<sup>61</sup> KEYHANI S, HEBERT P, ROSS J, FEDERMAN A, ZHU C, SIU A. Electronic health record components and the quality of care. Medical Care 2008;46:1267-1272. URL: <http://www.biblioteca.cochrane.com/BCPGetDocument.asp?SessionID=%206786298&DocumentID=GCS38-12>

<sup>62</sup> NOLAN M, DAVIES S, GRANT G. Working with older people and their families: key issues for policy and practice. Maidenhead: Open University Press; 2001.

<sup>63</sup> INSTITUT CATALÀ D'ONCOLOGIA. Centro Colaborador de la OMS para Programas Públicos de Cuidados Paliativos. Proyecto NECPAL CCOMS-ICO. Identificación y Atención Integral – Integrada de Personas con Enfermedades Crónicas Avanzadas en Servicios de Salud y Sociales. 2011. URL: [http://www20.gencat.cat/docs/salut/Minisite/ICO/Professionals/Documents/QUALY/Arxiu/DOC\\_NECPAL%20CCOMSICO%20INSTRUMENTO\\_DOC%20GENERALv1%20ESP%20VF%20201203.pdf](http://www20.gencat.cat/docs/salut/Minisite/ICO/Professionals/Documents/QUALY/Arxiu/DOC_NECPAL%20CCOMSICO%20INSTRUMENTO_DOC%20GENERALv1%20ESP%20VF%20201203.pdf)

<sup>64</sup> RIGBY M, RONCHI E. OECD-NSF Workshop: building a smarter health and wellness future –summary of key messages. 2011. URL: <http://keele.academia.edu/MichaelRigby#>

On the other hand, it is necessary for the comprehensive monitoring of users to keep in mind the health aspects in the evolution towards a new organisational model based on chronicity<sup>65,66</sup> and focused on the user<sup>67</sup> and their environment<sup>68,69</sup>. This is due to the influence that the **social determinants**<sup>70</sup> have over health and over the use of social and health resources<sup>71</sup> in the approach of dependency, fragility and care in homes or residences<sup>72,73</sup>. For this it is essential to establish mechanisms for **collecting data in a systemised way** which permits their subsequent analysis in order to optimise the improvement operations, not only in the individual care, but also in management and planning. It is here where the need for the ESSR with coordination bridges comes into play with the health information systems, such as DIRAYA in the case of Andalusia<sup>74,75</sup>.

The European Union recommends improving the integration of information between different states on the welfare and care of the population, including social care providers and initiatives in Ambient Assisted Living (AAL)<sup>76</sup>, as well as on the empowerment and self-management of the users in support of living independently at home, integrating aspects of health with social care<sup>77,78</sup>.

The long-term objective is to give preference to the needs of the user, and give them a comprehensive response of services and resources in the most efficient way possible, where the cost-benefit coupling and the quality of care are the key elements of the action. For this, there must be an adequate, accessible, complementary, balanced and coordinated **portfolio of services** in each territory, with clear inclusion criteria defined for each benefit.

<sup>65</sup> **Departamento de Sanidad y Consumo del Gobierno Vasco**. Estrategia para afrontar el reto de la cronicidad en Euskadi. Julio 2010. Publicación online URL: <http://cronicidad.blog.euskadi.net/descargas/plan/EstrategiaCronicidad.pdf>

<sup>66</sup> **MINISTERIO DE SANIDAD, SERVICIOS SOCIALES E IGUALDAD**. Estrategia para el abordaje de la cronicidad en el Sistema Nacional de Salud. Ed. Centro de Publicaciones SNA. MADRID. 2012. URL: [http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/ESTRATEGIA\\_ABORDAJE\\_CRONICIDAD.pdf](http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/ESTRATEGIA_ABORDAJE_CRONICIDAD.pdf)

<sup>67</sup> **KELLERMAN R**. Principles of the Patient-Centered Medical Home. Am Fam Physician. 2007 Sep 15; 76(6): 774-775. URL: <http://www.aafp.org/afp/2007/0915/p774.html?printable=afp>

<sup>68</sup> **ADLER NE, STEAD WW**. Patients in Context — EHR Capture of Social and Behavioral Determinants of Health. N Engl J Med 2015; 372:698-701.

<sup>69</sup> **CAMPOS ESTEBAN P, GIL LUCIANO A, JIMÉNEZ MUÑOZ M, JUSTO GIL MS, LABRADOR CAÑADAS MV, VILLAR LIBRADA ESCRIBANO M, MERINO MERINO B, MOLINA OLIVAS M, ZUZA SANTACILLA I**. Estrategia de promoción de la Salud y prevención en el SNS. Memoria de implementación 2014-2015 y evaluación preliminar. Subdirección General de Promoción de la Salud y Epidemiología. Dirección General de Salud Pública, Calidad e Innovación. Ministerio de Sanidad, Servicios Sociales e Igualdad. MADRID. 26/01/2016.

<sup>70</sup> **OMS**. Determinantes sociales de la Salud. Web oficial de la OMS. GINEBRA. URL: [http://www.who.int/social\\_determinants/es/](http://www.who.int/social_determinants/es/)

<sup>72</sup> **OMS**. Chronic Diseases. Web oficial de la OMS. URL: [http://www.who.int/topics/chronic\\_diseases/en/](http://www.who.int/topics/chronic_diseases/en/)

<sup>73</sup> **OMS y Banco Mundial**. Informe Mundial sobre la Discapacidad. GINEBRA. 2011. URL: [http://whqlibdoc.who.int/hq/2011/WHO\\_NMH\\_VIP\\_11.03\\_spa.pdf](http://whqlibdoc.who.int/hq/2011/WHO_NMH_VIP_11.03_spa.pdf)

<sup>74</sup> **ROMERO AD**. Historia Clínica y Social Electrónica Domiciliaria: Propuesta de Modelo Integrado. Trabajo de Fin de Máster de Telemedicina Universitat Oberta de Catalunya. BARCELONA. 2013.

<sup>75</sup> **RIGBY M**. The Challenges of Developing Social Care Informatics as an Essential Part of Holistic Health Care: Report of an ESF Exploratory Workshop held at Keele University on 21-23 July 2010 and Declaration drafted by Workshop Members. URL: <http://keele.academia.edu/MichaelRigby#>

<sup>76</sup> **STROETMANN KA et al**. European countries on their journey towards national eHealth infrastructures. Final European progress report. January 2011. URL: [www.ehealth-strategies.eu/report/report.html](http://www.ehealth-strategies.eu/report/report.html)

<sup>77</sup> **DEPARTMENT OF HEALTH UK**. Whole Systems Demonstrators - An Overview of Telecare and Telehealth. LONDRES. 2009. URL: [www.dh.gov.uk/en/healthcare/longtermconditions/wholesystemdemonstrators](http://www.dh.gov.uk/en/healthcare/longtermconditions/wholesystemdemonstrators)

<sup>78</sup> **SPC**. Review of recent social policy reforms. 2015 Report of the Social Protection Committee. UE Publication Office. Bruselas. 2015. URL: <http://ec.europa.eu/social/keyDocuments.jsp?advSearchKey=nsr2015&mode=advancedSubmit&langId=en&policyArea=&type=0&country=0&year=0>

## 3. RESISOR PROJECT

### 3.1 DEFINITION AND PURPOSES.

The EU **Programme for Employment and Social Innovation (EaSI)** of the Directorate-General for Employment, Social Affairs & Inclusion of the European Commission launched in 2014 Call VP/2014/008, in the context of social innovation, promoting the presentation of the **RESISOR (Regional Single Social Record) project** by the Regional Ministry of Equality and Social Policies.

RESISOR has different partner entities in the public realm: **Regional Ministry of Equality and Social Policies (RMESP)** as the leading entity, the **City Council of Dos Hermanas** and the **Agency for Social Services and Dependency of Andalusia (ASSDA)**. From the university sector: The **International University of Andalusia (IUA)**, which used the OTRI contracting procedure in order to incorporate the **Andalusian universities of Jaen, Huelva and Pablo de Olavide (Seville)** to the project. From the technological business sector, the companies **Isotrol, Sopra** and **Ayesa** participated, and from the sector of social service providers **DomusVI** (previously SARquavitae) participated.

The project was approved in 2015, beginning its proceedings on 15/10/2015 and carrying out its implementation during a period of three years. The development of the **RESISOR P1 tool** has a **total budget** of €2,471,899.23, of which approximately 20% corresponds to the contributions from the participating entities.

Despite the European nature of the call, the implementation of the project wholly takes place in Andalusia, which implies the positioning of the region in Europe as one of reference in the **management and development of information systems** in the field of social services, and in the challenge of the **digital transformation** of public administrations.

The project has, as its purpose, to lay the foundations for the construction of the first version of the **Single Social Record in Andalusia (ESSR)**, which we will call **RESISOR P1**, in order to, in a later study, structure in various stages of development and implementation, continue advancing in the construction of a comprehensive tool. For this, the following **specific objectives** were proposed:

- Objective 1. Undertake an **analysis of the current situation** of social services in Andalusia, and in turn, carry out a benchmarking with the purpose of detecting the best existing experiences in the environment with regards to the Single Social Record.
- Objective 2. Consolidate the **concept of the ESSR in Andalusia**, indicating, among other points, the functional and technological requirements, and the ethical and legal questions linked to its development.
- Objective 3. Develop the **information and technological components that allow for the visualisation of the ESSR**, as well as the management of the portfolio of services, of the resources and professionals that are linked to the service.
- Objective 4. Develop the **necessary technological components to begin gradually setting up the integration** of each and all of the information systems of the applied social services in Andalusia, in order to reduce duplications and contradictions.
- Objective 5. **Integrate three information systems** selected in the set currently in use for the processing and/or management of the social services in Andalusia.
- Objective 6. Develop the **necessary technological components to simplify and automate gradually the procedures** linked to the rendering of social services.
- Objective 7. **Implement three procedures**, selected based on their importance, intervention of diverse agents and/or absence or incomplete automation level of management.
- Objective 8. Implement **modules of statistical analysis** that allow for the improvement of the monitoring and evaluation of impact skills and performance of the ESSR.
- Objective 9. Implement a piloting **of the first version of the ESSR** in public and private entities.
- Objective 10. Design the set of adequate indicators in order to **evaluate the results** of the RESISOR Project and the implementation of the ESSR.
- Objective 11. Develop a **communication and dissemination plan** for RESISOR, in order to expand the activities carried out in the framework of the project.
- Objective 12. Define and implement two **Minimum Homogeneous Data Sets** that allow the integration of the Community Social Services of local entities (Dos Hermanas) and the participating private service provider (DomusVI) through data exchanges and interoperability, regardless of the automated management system used by the corresponding entity.

### 3.2 METHODOLOGY.

The project was structured in 6 work packages (WP), with one or two people in charge of coordinating each WP using different work methodologies.

#### 3.2.1. BACKGROUND AND CURRENT SITUATION OF THE ESSR IN THE EUROPEAN UNION (EU)

International organisations such as the **World Health Organisation (WHO)** and the **World Bank** or the International Foundation of Integrated Care (IFIC) and different countries (the United Kingdom, Australia, the United States, France, the Netherlands, Italy, etc.) are advancing in this field of the coordination and integration of care. The WHO is working on the development of its *WHO Global Strategy on People-centred and Integrated Health Services*, managed by the IFIC. Specifically, one of the WHO's strategies is the identification and collection of experiences from the countries which allow for the collection of evidence to begin about what works, how it works, and in what context it works.

On the other hand, technology has become an integral part of the activities in social work and this is expressed in various international guidelines and standards that are attempting to reorganise this field in this new digital age<sup>79, 80, 81</sup>. The objectives of these standards are:

- Support social work professionals in the use of technology in everyday practice.
- Be aware of the practical considerations and ethical responsibilities of using technology.
- Inform social work professionals, employers and citizens about the best standards in the practise of social work.

At the European level, the **European Commission** passed the Social Investment Package (SIP)<sup>82</sup> and Member States are implementing it and promoting the integration of the services in a quality search focused on users and an improvement of communication between the health and social services<sup>83</sup>, having recognized that these are not only a network for public safety, but a fundamental part of society and, therefore, fundamental in any approach to social investment. The **European Social Network (ESN)** is reviewing the concept of integrated services from the perspective of public social services<sup>84</sup>.

From the European institutions there is an overall tendency towards implementing an Electronic Medical Record (EMR), taxonomically and semantically interoperable, standardised and secure, for the benefit of patients, health professionals and society in general, although it prioritises the clinical over the health and exchanging information with social registers. The experiences of digitalising social services are still in the initial stages regarding the generalisation of a single, shared tool. The tendency is to integrate social information packages to the already implemented and operating EMR.

It should be noted that within Europe, **Spain and the Nordic countries are leaders** both in the degree of digitalisation at all levels of care<sup>85</sup>, and in the coordination<sup>86</sup> and application of the most advanced technologies in healthcare.

<sup>79</sup> **NLASW**. Standards for technology use in social work practice. 2012. URL: [http://www.nlasw.ca/sites/default/files/inline-files/Standards\\_For\\_Technology\\_Use\\_In\\_Social\\_Work\\_Practice.pdf](http://www.nlasw.ca/sites/default/files/inline-files/Standards_For_Technology_Use_In_Social_Work_Practice.pdf)

<sup>80</sup> **NLASW**. Standards for social work recording. 2014. URL: [http://www.nlasw.ca/sites/default/files/inline-files/standards\\_for\\_social\\_work\\_recording\\_2014.pdf](http://www.nlasw.ca/sites/default/files/inline-files/standards_for_social_work_recording_2014.pdf)

<sup>81</sup> **Australian Association of Social Workers (AASW)**. Practice standards. Canberra, ACT: 2013. URL: <https://www.aasw.asn.au/document/item/4551>

<sup>82</sup> **COMISIÓN EUROPEA**. Social Investment package (SIP). Brussels. 2013. URL: [file:///C:/Users/FAT/Downloads/SWD\\_Social-Investment-ESF\\_en.pdf](file:///C:/Users/FAT/Downloads/SWD_Social-Investment-ESF_en.pdf)

<sup>83</sup> **MAHMUD AJ, OLANDER E, WALLENBER G L, HAGLUND BJA**. Health promoting settings in primary health care - "hälsotorg": an implementation analysis, BMC Public Health, 2010; 10:707; 1-9. URL: <http://www.biomedcentral.com/content/pdf/1471-2458-10-707.pdf>

<sup>84</sup> **LARA MONTERO A, VAN DUJN S, ZONNEVELD N, MINKMAN M, NIES H**. Integrated social services in Europe. A study looking at how local public services are working together to improve people's lives. European Social Network, Brighton, 2016.

<sup>85</sup> **COMISIÓN EUROPEA**. Libro blanco sobre el futuro de Europa. Reflexiones y escenarios para una Europa de los veintisiete en 2025. COM(2017) 2025. BRUSELAS. 1/3/2017. URL: [https://ec.europa.eu/commission/sites/beta-political/files/libro\\_blanco\\_sobre\\_el\\_futuro\\_de\\_europa\\_es.pdf](https://ec.europa.eu/commission/sites/beta-political/files/libro_blanco_sobre_el_futuro_de_europa_es.pdf)

<sup>86</sup> **PINZÓN-PULIDO S, ALONSO-TRUJILLO F, TORRÓ-GARCÍA-MORATO C, RAPOSO-TRIANO MF, MORILLA-HERRERA JC**. Experiencias, modelos y claves para la coordinación e integración de servicios sociales y sanitarios. REVISTA: Enferm Clin. 2016;26(1):3-6 URL: <http://www.elsevier.es/es-revista-enfermeria-clinica-35-articulo-experiencias-modelos-claves-coordinacion-e-90447020>

Countries such as **Italy, France** and **Germany** have begun a pilot stage the digital transformation and connection of their public health organisations<sup>87</sup>.

In Europe, many local projects have been carried out regarding the integration of socio-health information systems. Many of these activities consist of theoretical models and most of these are restricted to local telephone health care or telemedicine, and do not include the social care that is becoming a greater part of at-home care.

### 3.2.2. BACKGROUND AND CURRENT SITUATION OF THE ESSR. IMPLEMENTATION AT THE NATIONAL LEVEL AND IN THE AUTONOMOUS COMMUNITIES OF SPAIN

If we review the current proposed and agreed upon models of the ESSR in the various Autonomous Communities, we can confirm the low implementation of these information systems and, above all, the absence of consensus between them when it comes to the contents of the same. The same occurs in the numerous information systems which have been developed at the national, autonomous and local levels in order to coordinate the Specialised Social Services.

At the national level, the closest thing to an ESSR that has been implemented is the **Social Services User Information System (SSUIS)**. It is a program that collects and analyses the information of Social Services users and those of the national service which began to be implemented in 1993 and is used by the Community Social Services in almost every Spanish City Hall. The data collection is done by the social work professionals and other CSS professionals. The data use is carried out at various levels: local (social work units), the basic area of social services, regional and national levels. It facilitates the daily management by homogenising concepts and carrying out a standardised codification of certain procedures. It contains tools to certify the work of the professionals, providing reliable information which serves to improve the planning and management of resources and allows a simple transfer between the various administrative levels and networking. The information system has:

1. A **backbone** of personal, social and family, housing, and social intervention (claim, professional assessment, applied resources - suitable/applied resources)
2. **Specific modules:** Module of at-home, child abuse and gender-based violence assistance.

Regarding data protection, the data that may be accessed outside the CSS are transferred to statistical data. The Local Corporation is the controller of the file. Sensitive data may only be accessed by social work professionals in the entity which collects them.

The SSUIS is limited given that it requires the inclusion of many more processes, data files and to improve the tools of data exploitation. Currently, everything the SSUIS does not offer is fulfilled by other databases and other parallel software applications.

Other implementation system at the national level is the **System for Autonomy and Care for Dependence (SACD)**. In 2006, the Spanish Parliament approved Law 39/2006, of December 14, on the Promotion of Personal Autonomy and Care for Persons in Situation of Dependency (LAPAD)<sup>88</sup>, through which a new subjective right of citizens, social services and economic benefits to care for people in situations of dependency was introduced to our legislation. This is one of the main challenges of social policy: to meet the needs of those persons who, because they are in a situation of special vulnerability, require assistance to carry out the essential activities of daily life and to achieve greater personal autonomy. The Law regulates the basic conditions for the promotion of personal autonomy and for the care of persons in situations of dependency through the creation and implementation of the **SACD**. To manage it, the SACD was implemented: Information System of Dependency, with a common information model at the national level. Some regions have developed their own complementary autonomous system, as in the case of Andalusia with the **NETGEFYS system**. To date, on the national level SISAAD has been developed, but there is no generalised shared care model between the social and health fields. Nor is there interoperability of their information systems in this field, except for some specific actions, such as the coordination of the process of digital **health reports** for the

<sup>87</sup> GARCÍA MARCIEL R, LOBATO BELEIRO B. La transformación digital en la integración sociosanitaria. Fundación CASER. Madrid. 2015. URL: [http://www.fundacioncaser.org/sites/default/files/b.lobato\\_y\\_r.marciel\\_latransformaciondigital\\_web.pdf](http://www.fundacioncaser.org/sites/default/files/b.lobato_y_r.marciel_latransformaciondigital_web.pdf)

<sup>88</sup> Ley 15 39/2006 de 14 de diciembre, de Promoción de la Autonomía Personal y Atención a las personas en situación de dependencia (LAPAD). URL: <https://www.boe.es/buscar/doc.php?id=BOE-A-2006-21990>

assessment of dependency, which was done in Andalusia<sup>89</sup>, or the early care information system with shared data between health, education and social services (**ALBORADA System**)<sup>90</sup>.

Additionally, both SSUIS and SACD are two systems of the Ministry of Health, Consumer Affairs and Social Welfare that do not have interoperability between them, which makes the implementation of the ESSR more difficult.

There are many Autonomous Communities (AC) in Spain which have put into practice experiences of coordination between social and health services<sup>91, 92</sup> however not all of them are in the same stages of integration; the Region of Castile and Leon has had the most comprehensive development in social and health management.

### 3.2.3. GUIDING PRINCIPLES AND AREAS FOR THE EVALUATION OF THE ESSR TOOL.



Fig 5. Guiding principles for the evolution towards a Strategic Governance of the Social Services.

<sup>89</sup> RODRÍGUEZ GÓMEZ S, COLLADO JIMENEZ M, GUTIÉRREZ SURIA MA, LAFUENTE ROBLES N, MARTÍNEZ DOMENE M, ALONSO TRUJILLO F, GRUPO PROYECTO COORDINACIÓN DEPENDENCIA ASSDA-EASP. Optimización de la gestión del informe de salud en el procedimiento de resolución de la solicitud de la prestación para la dependencia en Andalucía, mediante la metodología LEAN de mejora de procesos. Jornadas de Salud Pública – La salud pública ante el cambio social del S XXI. EASP – Escuela Andaluza de Salud Pública. POSTER ID: 521. Sesión: Tema libre 3. GRANADA. 9-12 Diciembre 2014. URL: [http://www.redandaluzadesaludpublica.org/jornadas/comunicaciones/modules/request.php?module=oc\\_proceedings&action=view\\_php&id=521&a=Accept](http://www.redandaluzadesaludpublica.org/jornadas/comunicaciones/modules/request.php?module=oc_proceedings&action=view_php&id=521&a=Accept)

<sup>90</sup> CONSEJERÍA DE SALUD DE LA JUNTA DE ANDALUCÍA. Ficha completa de ALBORADA: Sistema de Información de Atención Temprana. URL: <http://www.juntadeandalucia.es/repositorio/usuario/listado/fichacompleta.jsf?idProyecto=835>

<sup>91</sup> GARCÍA G. La coordinación de los servicios sanitarios y sociales. Un discurso por una atención humanizada y de calidad y en defensa de los derechos sanitarios y sociales. Alianza servicios sociales y sanitarios. El valor de lo público. Asociación Estatal de Directores y Gerentes en Servicios Sociales. 2016; 9-11. URL: [http://www.directoresociales.com/images/documentos/sociosanitario/Coordinacin%20Servicios%20Sociales%20y%20sanitarios%20.%20AEDGS\\_S.pdf](http://www.directoresociales.com/images/documentos/sociosanitario/Coordinacin%20Servicios%20Sociales%20y%20sanitarios%20.%20AEDGS_S.pdf) (Consultado el 19/6/2017.)

<sup>92</sup> MARTÍNEZ DOMENE M. El modelo Andaluz de coordinación sociosanitaria. Jornadas sobre la coordinación entre los sistemas públicos de salud y servicios sociales desde la atención en los servicios de urgencia. SEVILLA. 5/11/2015. En: Colegio Oficial de Diplomados en Trabajo Social y AA.SS. de Sevilla. Actas de las II Jornadas Provinciales del Colegio Profesional de los trabajadores sociales de Sevilla. 2016: 15-24. URL: [http://www.cgtrabajosocial.es/app/webroot/files/consejo/files/Actas%20II%20Jornadas%20Coord%20%20Sociosanitaria%20\(1\).pdf](http://www.cgtrabajosocial.es/app/webroot/files/consejo/files/Actas%20II%20Jornadas%20Coord%20%20Sociosanitaria%20(1).pdf)



### 3.3. DEVELOPMENT

#### 3.3.1. BASIC FUNCTIONAL REQUIREMENTS FOR THE ESSR OF ANDALUSIA.

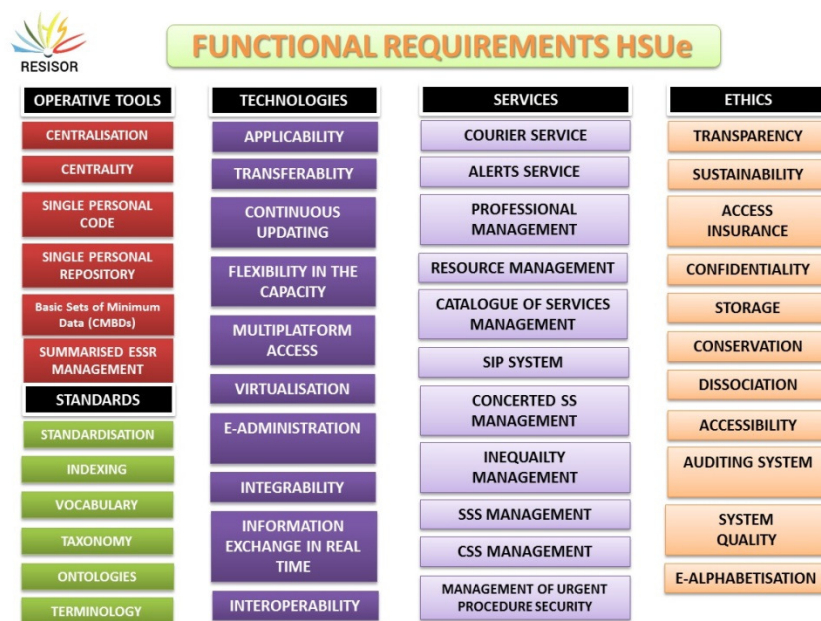


Fig 6. Basic functional requirements for the operation of the ESSR of Andalusia.

#### 3.3.2. INFORMATION TECHNOLOGY DEVELOPMENT

The second PT involved the designing and development of the technological platform that the ESSR had to manage and the design and development of the selected procedures for their subsequent validation in WP3 of the pilot and WP4 of evaluation.

To coordinate the work, it was divided in different parallel and correlated tasks with **focus working groups** for each one, which allowed for different **specific reports** to be generated (See work scheme in Fig. 7).

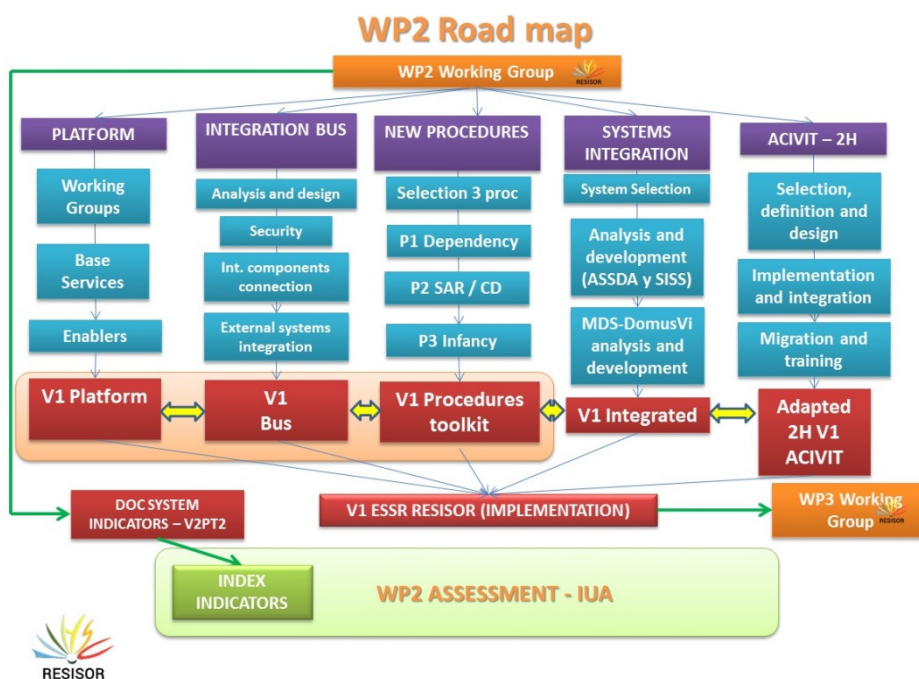


Fig. 7. Roadmap of the WP2 working group, interrelation of tasks and expected deliveries.

The ESSR was structured by means of different components (fig. 8):

- The **portfolio of social services** as a nexus of union between the administration and the population, focused on the needs of the person, and which enables the designing of care through the **SIP**.
- The **Map of Systems** which assigns and coordinates the different computer systems used to manage the necessary information for the management of resources and processes of the organisation in both **primary and specialised care**.
- The **Map of Processes** which draws the different tasks to be executed by the professional that manages the resources, services, procedures and systems.
- The **management of the professional** who takes part in the whole care process, and the information generated or directed to the informal personnel of the system (relatives and informal caregivers).
- The **Single Social Record** (SSR), as a tool which contains all of the information collected on each person and their family. In the record, the different social interventions applied are registered and it allows for the objective monitoring of the same in time.

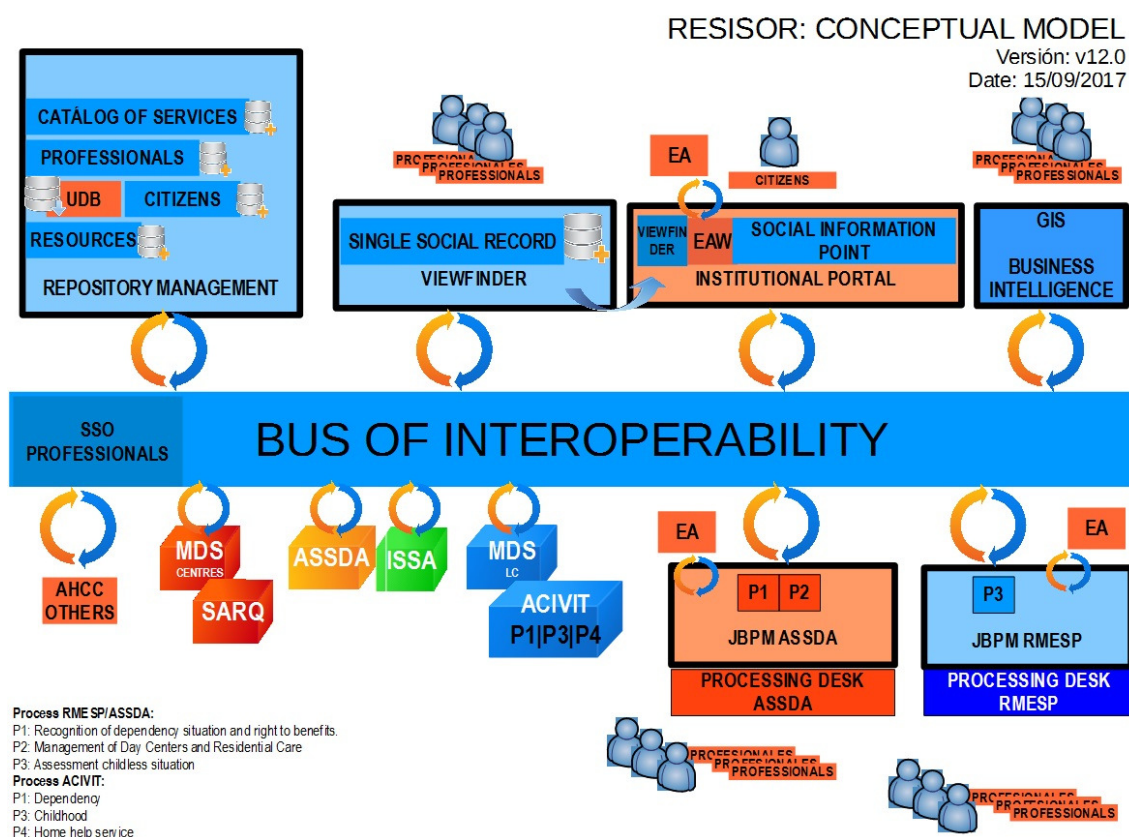


Fig. 8 - Integrated model of Social Services focused on the ESSR.

(UDB: Unified Database, GIS: Geographic Information System, SARQ: Sar Quavitae, currently DomusVI, MDS: Minimum Data Set, ASSDA: Agency for Social Services and Dependency of Andalusia, ISSA: Information System of the Social Services of Andalusia, P: Procedures, RMESP: Regional Ministry of Equality and Social Policies, LC: Local Communities, AHCC: Abolition of Hard Copy Certificates, EA: E-Administration, EAW: Electronic Administration Window, SSO: Single Sign On, JBPM: Java Business Process Model)

An integration model was used based on a Service Oriented Architecture (SOA), in which a central mechanism of communication is established between systems through an interoperability bus, and a model of governance in which all components of the project participated. In this way, common data access services, information sheets of said services, protocols of interaction between the different systems and general rules of publication and management of services have been established.

On the other hand, the system complies with the interoperability and security requirements established by the corresponding Spanish National Interoperability Framework (NIF) and National Security Framework (NSF), preparing mechanisms of controlled access and prevention systems which allow the management and detection of possible situations of risk.

The suggested System is based on the integration of current systems with the components that provide support to the ESSR. Additionally, the necessary viewers for the population and professionals were implemented. Furthermore, an electronic processing platform was implemented for those procedures unsupported in any system.

### 3.3.2.1. MANAGEMENT PLATFORM

Platform based in e-administration components that provide support to the whole system and on which new supports in other existing systems are implemented

Said system is based in new technologies, providing a scalable, robust and modern system. This system consists of at least the following functions:

- Models procedures and process files.
- Carries out the telematic record, digital signature, digital certified copies, receipt of electronic requests to begin proceedings and electronic notifications.
- Generates the necessary documentation during the processing of the files.
- Manages appointments with the population.
- Corrects or requires the necessary documentation for the processing of the file.
- Creates reports during the processing.
- Evaluates the files for their assessment.
- Controls the processing timelines of the procedures.
- Manages user appointments.
- Generates mass communications with the population.
- Carries out the account management of the payments.
- Displays alerts that are of interest for the users.
- Enables the export of specific information in different formats.

In future versions of the tool, there will be an increase in the number of functions beginning to be demanded by persons with responsibilities in the public administration, such as:

- Open files for review on a massive scale.
- Complete the aid payments and financial assistance (payrolls).
- Generate the files of assistance payments.
- Communicate with the Register of Public Social Services (RPSP).
- Manage the settlement of resource allocation.
- Upload the files of deceased persons.
- Send out alerts to the managing organisations to inform them of the death of a person or other circumstances of interest about the persons subject to administration.

#### Integrator

Component that orchestrates the services published and consumed by the different systems included in the defined diagram. For the connection of the current systems to the integrator it is necessary, in addition to publishing the services offered by the system to be integrated, changing the current processes so that they consume the necessary services.

#### Viewers

Public area from which the population and professionals can access and consult the ESSR and the initiation of the procedures through the **electronic window**.

- The **viewer for the population** provides support to the in-person and telephonic care in a personalised and proactive way.
- The **virtual office**, both on the Internet and on citizens' mobile devices, to undertake any type of interrelation with the administration. Information from the catalogue of proceedings, presentation and registration of documents electronically, e-copy of documents, e-receipts, telematic payments, notifications, consulting the status of proceedings, etc.
- The **viewer for the professional** for the processing (telematic or in-person) and the change control by the management units.

### Business Intelligence Platform and GIS

It is used for management of information: extracting data, organise them, treat them, and obtain from them information that facilitates the possibility of furthering future occurrences supporting thus the decision-making process.

It integrates the necessary indicators that facilitate the evolution of the social policies towards the real need for social services that exists in society. That makes the geolocalisation of resources and professionals essential, as well as the population with the right to these.

The technological tasks to be carried out are:

- The development of the management platform.
- The implementation of new procedures.
- The implementation of the Integration BUS.
- The adaptation of existing systems.

### Development of the Platform

The construction of the management platform has meant the first step for the implementation of a **nucleus of common services of the e-administration** primarily made up of:

- **Processing engine.** Brings together all of the common and necessary functionality to develop the different processes of work associated with the processing and management of the files. Its objective is to facilitate the efficiency in the displaying of the processing of administrative procedures. This module also simplifies the workflow management benefiting in a greater adaptability and flexibility of the system in the face of administrative or technological changes.
- **Digital administrative information.** System that maintains the documentary information and that of the user. Manages appointments with the population.
- **Digital file.** System to electronically manage the file.

Following the implementation of the nucleus of services, then began the integration with the **Enabling Elements**, modules of common use that enable to proper operation of the nucleus of services of the e-administration.

- **Electronic Signature.** Authentication and electronic signatures services based on digital certificates and PKI (signing and multisigning of files, consult and verification of signatures, etc.).
- **Electronic Signature Software** is the interface tool, the purpose of which is to provide to organisations and administrative units with the use of the advanced electronic signature based on the recognised certificate of documents originating in various independent information systems, with the resulting acceleration of administrative activities.
- **Telematic Notification.** Delivery system of official notifications telematically, allowing for the reliable verification of their delivery to the interested person.
- **Telematic Registration.** Enables the presentation of documentation in-person or telematically.

#### **3.3.2.2. THE IMPLEMENTATION OF THE INTEGRATION BUS.**

The interconnection between the different platforms and systems is possible thanks to the Bus of Corporate Services or *Enterprise Service Bus* (ESB). For this it is necessary to install said Bus together with the publication of minimum services which provide access to the ESSR.

These services must provide the access in consultation mode of the social record, and register all of the information regarding the population together with their social benefits.

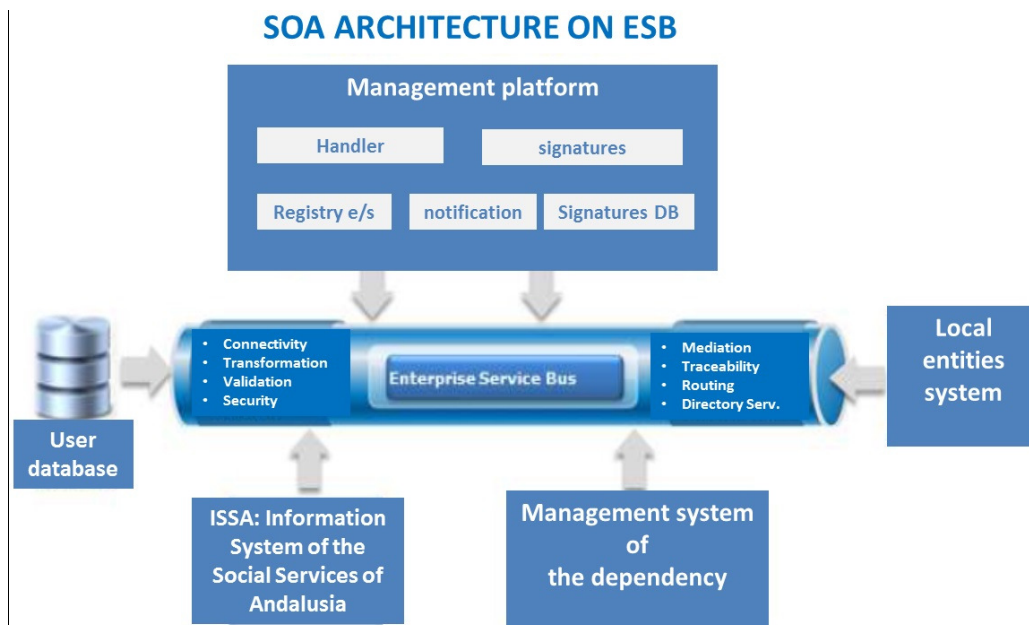


Fig. 9 - Service Oriented Architecture (SOA) about Enterprise Services Bus (ESB)

The works for the implementation of the integration Bus were addressed through the flexibility provided by the **Service Oriented Architecture (SOA)**. It is a theoretical paradigm that understands that applications should be formed through the composition of implementation units known as services. The services are conceptually autonomous, opaque and loosely connected, in other words, each service presents and executes a specific and independent function from other services: it does not need other services, nor does it know other services (fig. 9).

That, in turn, enables the introduction, from a technological perspective, of the following objectives:

- B2B (Business-to-Business) Interconnection between Bodies of the Andalusian Public Administration.
- Simplified development and maintenance.
- Elimination of integration mechanisms that create coupling and fragility (ex. DB views).

Transition from a *SPAGHETTI* type architecture to an architecture on distributed ESB (Enterprise Service Bus).

With this model of **SOA on ESB architecture** the information flow from the ESSR through the organisation is achieved rapidly and in a timely manner, from the production applications of the same to the applications that need to consume it. **The primary characteristics of an ESB is to facilitate the virtualisation of the organisation's resources**, enabling the logic of the business to be developed and manipulated in flexible manner and independent from the infrastructures. The resources of an ESB are modelled like services that one or more business operations offer. This enables:

- **Greater productivity and agility to be reached** in the processes of the Management of the ESSR, and other adjacent ones, while safeguarding the sustainability and durability of the Platform.
- **Continued operability** for the considerable amount of Management systems related to RMESP currently in each of the entities.
- **Enhancement of the different processes of evolution** of each of the systems, making this evolution transparent to the rest of the users.

The ESB behaves as a central point in which the services are published and from which they are consumed. The requisites for an ESB are:

- **Communication middleware supporting a wide variety of paradigms** (such as synchronous and asynchronous communication, request/response, one and multiple recipients, call-back), service quality (such as security, shipping and reception guarantee, performance, transactionality), APIs, platforms and standard protocols.
- Components that permit the **injection of intelligent processing** into the flight, both requests and responses.
- **Tools based on standards** in order to facilitate the fast integration of services.
- **Management system** to facilitate the short coupling between applications and their interactions.

And among the advantages provided by an ESB it is worth mentioning the following:

- It provides the implementation of the **stack of standards around the Web Services**, the standard support to the technical interoperability between heterogeneous technological platforms.
- It articulates the **system of sending and receiving messages** between the different services enabling different modes of communication: synchronous, asynchronous, by subscription...
- It permits the **conversion between standard protocols** preventing systems from having to know the details of each of these protocols.
- It offers advanced capabilities for the intelligent **transformation of data and the routing**, enabling the composition of services in order to create more complex functionalities.
- It provides a **security framework** based on the WS-Security standards, enabling the authentication and authorisation mechanisms to be articulated based on distinct criteria.

### **SOA Governance Register**

Given the independent and uncoupled nature of the services, it was necessary to articulate mechanisms that align the synergies in order to govern the ecosystem of services and integrations. It involves identifying a SOA Government strategy by means of the definition of the details to keep in mind during the life cycle of the services and the launch of initiatives to safeguard its compliance. Some aspects to keep in mind are:

**Organisation.** The proposed integration and interoperability model requires a commitment on the part of the users to modify the traditional way of carrying out their work in order to rationalise the efforts and obtain the advantages that SOA brings in terms of flexibility and recycling. For all of this it was necessary to:

- Define a correct Change Management that includes a Communication and Training Plan in order to minimise the inherent negative effects of any change.
- Designate responsible persons in charge of leading the improvement processes.
- Define and communicate responsibilities.
- Define the policies and procedures in the area of organisation.

**SOA Government Team:** It is one of most important tasks and consists of forming a team that is in charge of managing the SOA Government. It is an organisation in charge of promoting and monitoring the compliance of the good practices and the procedures in the SOA infrastructure. Therefore, there will have to be:

- Detailed responsibilities of this team.
- Components of the team. Assigned dedication to each component.
- Organisational model: frequency of meetings, communication model with other teams, policies to review the defined policies, management tools... Part of the work of this project will include the installation and configuration of the support tools for the team.

**Architecture:** The architecture reflects the model to be implemented in terms of:

- Good practices in development of the services: technical instructions for coding, design patterns...
- Good practices in the composition of the services.
- Models for development, display, management and monitoring of the services. Definition of the development environment itself, and of the tools and procedures that will support the maintenance of the source code, the management of the versions of the services, the monitoring of service agreements and metrics, the notification of service degradation...
- The standards to which the service developments and the composition of the service will have to adhere. There is an infinite list of official de facto standards that, in many cases, address the same problem areas. It is necessary to define which will be used and which will not be used in order to respond to common needs: verification, authorisation, federation of domains, transactionality, secure delivery, etc.

### **Adaptation of existing systems**

Of the existing Systems that provide coverage to the current social services, 3 were selected that were adapted in order to be able to offer information through the Integration Bus. Of those, the 3 proposed candidates in a first approximation were:

- The Integrated System of Social Services (ISSS)
- Integrated Systems of the ASSDA.
- The ACIVIT Platform for managing community social services

One of the most important tasks in this stage is the analysis of the information contained in said systems for the extraction and uploading in the new registers. Therefore, it was necessary to apply data quality, detection, correction and filtering processes to give consistency to the information gathered in the existing systems.

### 3.3.2.3. - IMPLEMENTATION OF NEW PROCEDURES.

There are numerous services that are not supported in the current management systems. 3 services were implemented in the new platform, therefore modelling their procedures.

For the implementation of these procedures, the use of an incremental model based on successive views that deepen in the identification, description and modelling of the processes was proposed, which provides a methodology for the capture of information of business processes, as well as the rules of modelling and the resulting artefacts to be used in the analysis and definition of a business process.

### 3.3.2.4. INTEGRATED MANAGEMENT AND SPECIAL REQUISITES

Information technology as a tool for social management has introduced a new way of knowing, measuring and tackling the problems and processes of professionals and users of social services with profound implications in knowledge-based methodology. We must consider that its use is key and necessary for proper development and continuous updating.

If we want to give comprehensive responses quickly, we need a global vision and knowledge and automated and digitised analysis methods and instruments that facilitate it.

The ESSR will signify an improvement in the operation of the social services acting in their different fields of management and coordination:

#### 3.3.2.4.1. IN PLANNING

The **Regional Ministry of Equality and Social Policies (RMESP)** continuously develops and applies policies aimed at providing dynamic responses to social needs that arise within the Autonomous Community, one of its objectives being to constantly improve social welfare.

For this, it has —in addition to planning methods and extensive experience accumulated in recent years— a set of computer tools that allow, on the one hand, management to be streamlined and, on the other, to present the results of the work completed to the public. The Integrated System of Social Services (ISSS) is without a doubt one of the best examples of this.

The ISSS integrates, on a single and centralized database, much of the information generated in the RMESP, facilitating interrelated consultations, avoiding duplication of data and maintaining, under all circumstances, the security levels in the access to the information that the current regulations require.

As an Administrative File Management System, the ISSS controls the initiatives to which they are subjected; it takes into account the receipt of the requests, the control of the submitted documentation, the control and the management of the order and of the terms of execution of the procedures, and the registry of the actions, among others.

The system covers procedures and other needs in the following functional areas:

- Childhood and Family
- People with Disabilities
- People in social exclusion
- Elderly People
- Care for Dependency
- Non-contributory Pensions and other Social Security
- Subsidies
- Registration of entities and centres
- Inspection
- Administrative authorisations and certificates

In summary, the ISSS is the computer system that permits the processing of the files and administrative procedures of the different directing centres of RMESP.

It basically consists of a **horizontal subsystem** to define and configure all the elements of the administrative procedure, a **corporate subsystem** to define and configure the homogeneous elements of the system as well as allowing the existing information to be shared in a single common database and make a collective use of the same, and a series of **vertical subsystems** that define and configure the specific elements and cover all phases of the management cycle streamlining, rationalising and standardising the administrative circuits and the processing of files.

The ESSR will integrate part of the information in these registries and will help to improve the knowledge and value the effectiveness of the services provided, optimise the resources and improve the quality of the same. It will allow us to rise to other instances the deficiencies, the new situations, the imbalances between resources and the relations with other collateral services with social services.

#### 3.3.2.4.2. IN THE PROGRAMMING AND MANAGEMENT OF SERVICES (CENTRAL SERVICES/TERRITORIAL SERVICES).

The coordination and programming of the different services and benefits is normally carried out from different directing centres and organisations dependent on the Regional Ministry. For example, the **Agency for Social Services and Dependency of Andalusia (ASSDA)**, has as its primary purposes:

- The development of the activities and the provision of the services necessary for the management of the System for the Autonomy and Care for Dependency in Andalusia.
- The promotion, development and management of social care resources for people, families and groups in which they are integrated to promote their well-being; as well as the management of resources and the development of actions in the area of child protection.
- The care for drug dependencies and addictions; and the social incorporation for people in the situation of, or at risk for, social exclusion.

In order to carry out its competences, it has a series of desktop tools and in some cases as a web application, among which are the agreement of:

- **SDCE - Stays in Day Centres for Elderly People:** It is a system for managing the economic settlements of the day centres for elderly people from the data reported by the centre about the users' stays. For the disclosure of this data, centres are provided with a desktop application from which they can register all of the information about the users' stays and generate a plain text file that they send every month to the Agency with the necessary data in order to calculate the monthly payment.
- **SDCD - Stays in Day Centres for People with Disabilities:** It is a system for managing the economic settlements of the day centres for people with disabilities from the data reported by the centre about the users' stays. For the disclosure of this data, centres are provided with a desktop application from which they can register all of the information about the users' stays and generate a plain text file that they send every month to the Agency with the necessary data in order to calculate the monthly payment.
- **SDCOT – Stays in Day Centres for Occupational Therapy:** It is a system for managing the economic settlements of the day centres for occupational therapy from the data reported by the centre about the users' stays. For the disclosure of this data, centres are provided with a desktop application from which they can register all of the information about the users' stays and generate a plain text file that they send every month to the Agency with the necessary data in order to calculate the monthly payment.
- **AHAS – At-Home Assistance Service:** It is a system for managing the economic settlements of the local entities that provide home care service. To report the hours rendered and the service costs, the local entities are provided with an application from which they can register all of the information.
- **RCS- Residential Care Service** It is a system for managing payments and concertations in Residential Care Centres for elderly people and people with disabilities. The centres are provided with an application to incorporate the information of the stays of the beneficiaries which enables them to generate the monthly payments.
- **ISPASDA - Information System of the Andalusian Plan on Drugs and Addictions (PASDA)**, in order to obtain and analyse quality data about the persons cared for in the Public Care Network for Drug Dependencies and Addictions in Andalusia and about the preventive, welfare and social incorporation interventions and treatment programmes offered.



The RESISOR Project has made it possible to develop some of these applications to make them accessible in web format and integrate them into the Integral Dependency System, all from a single data approach that improves management efficiency, optimizes resources and increases the quality of service to the population.

### 3.3.2.4.3. IN THE CSS (LOCAL)

#### 3.3.2.4.3.1. Working group tasks for the design of the integration with ACIVIT

One of the aims of the RESISOR Project was to implement and introduce the necessary technical means in order for the community social systems could interconnect their information systems with the SSR via the interoperability BUS. For this, within the WP2, the adaptation and configuration of the ACIVIT information system to the social services of the City Council of Dos Hermanas, hereinafter the City Council, was of the utmost importance.

Therefore, **a working group made up by the team from Isotrol and the persons in charge of the social services of the City Council** was created. The aim of this working group was to define the operation of the procedures to develop within the scope of the RESISOR Project within the social services of the City Council, to adapt ACIVIT to said operation and connect it, at the same time, to the SSR via the interoperability BUS.

Personnel from both RMESP and ASSDA also participated in the working groups at certain times.

#### 3.3.2.4.3.2. Selection, definition and design

In another working group, beforehand and in general for the RESISOR Project, it was decided which procedures should be incorporated in both the SSR and ACIVIT. In this working group, the first thing done was to **study the aptitude to implement these procedures or only a set of them**, keeping in mind the characteristics of the Dos Hermanas City Council itself.

Once it was known which procedures would form a part of the RESISOR Project, they worked on defining the **Minimum Data Set**, hereinafter MDS, of each of the said procedures.

The MDS can be defined as that information that is indispensable in order for the procedure to be processed within the City Council. To define them, they kept in mind, in addition to the normal operation of the City Council, the necessary data for the annual exports to SSUIS<sup>93</sup> (Social Services User Information System), as well as the information that could be extracted from the information systems of the RMESP.

Subsequently, the processing of different procedures, or in other words, the design of **community processing**<sup>94</sup> was defined. This design had as its base the processing of procedures that were carried out in the City Council, but they also used this point of the project to optimise this processing. A very important aspect of the design was to define in what moment of the processing should there be a communication between the community information system and the SSR in order to share information.

The definition of the graphic design<sup>95</sup> was made which should have the version of ACIVIT to be implemented in the City Council. The main guideline was that it catered to the corporate colours that the city council currently has and, of course, that it had the coat of arms of the town hall.

It was not necessary to delve into aspects such as usability, ease of use, etc..., because ACIVIT already had considered for them in its original construction.

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<sup>93</sup> SIUSS: <https://www.msbs.gob.es/ssi/familiasInfancia/ServiciosSociales/Siuss/home.htm>

<sup>94</sup> Entregables RES0001E\_DDS. Definición Funcional\_Acivit\_Solicitud\_Valoracion\_Dependencia\_0100 y RES.E.DDS. Definición Funcional Acivit ProgramadeTratamientoFamiliar\_0100

<sup>95</sup> Entregable Prototipo ACVITI\_v1

### 3.3.2.4.3.3. Implementation and integration

Following the definition of the procedures that would form a part of the RESISOR Project, ACIVIT needed a series of works for parameterisation, configuration, adaptation to said procedures. Furthermore, a series of new developments were necessary for the integration of ACIVIT with the interoperability BUS.

In order to carry all this out, the first thing the working group did was to **define the system requirements**<sup>66</sup>. In these requirements they defined very important aspects such as:

- **Infrastructure.** That is, which infrastructure requires the implementation of ACIVIT in the City Council, for its optimal functioning, taking into account the physical distribution of the offices that would use the system, as well as the necessary integration with the BUS located in the RMESP.
- **Parameterisations.** To define the necessary configuration for ACIVIT for its proper adaptation to the City Council.
- **Implementations.** To know which modules of ACIVIT required an additional implementation for the adaptation to the RESISOR Project objectives.
- **Migrations.** Which information from other sources was necessary to upload in ACIVIT for its operation within the City Council.
- **Integrations.** To define with what other systems, from RMESP or the City Council, were necessary to connect to ACIVIT in order to cover the needs of the RESISOR Project.

Once the definition of the requirements was finalised, the necessary works of **parameterisation and implementation** were carried out. The parameterisation was primarily focused on the hierarchical organisation, the roles of the City Council personnel and both the data of the population and of the different technical interventions. For its part, the implementation affected practically all of the functional modules of ACIVIT:

- **Core.** The core of ACIVIT was affected in some adaptations.
- **Procedures.** The procedures did have a high volume of changes, mainly due to the fact that each City Council or body in question has a quite different operation from the rest, and ACIVIT requires this adaptation.
- **Integration with BUS.** The development of a new module was carried out, as an extension of ACIVIT, which contains all the necessary connection methods with the web services that the interoperability BUS offers to the community information systems.

Specifically, it is the integration with the BUS RESISOR where ACIVIT suffered the most changes, given that it is a completely new functionality. This implementation was carried out keeping in mind the following guidelines:

- **Transparency for the user:** the communication with the archives is not the responsibility of the ACIVIT user, but of the application; therefore, the way of interacting with the application is not changed at any time. The communication is done without human intervention and, in the case of being unable to make the communication, the user should be able to continue their work without interference.
- **Synchronous and asynchronous information reporting.** ACIVIT allows the information to be sent/collected from the files at the moment in which a user modifies the information related to a file or personal file, as well as in a later programmed process. This makes it possible that if the communication is lost in the moments of information modification, the changes are not lost, given that they will be sent in a subsequent synchronisation process. Furthermore, the communication type of the application (synchronous or asynchronous) can be parametrised by a user with an administrator profile, so that bodies with connection limitations can choose to send the data once a day in the programmed process.
- **Data transformation:** the ACIVIT data models and the RESISOR repositories are not 100% compatible when modelling the reality of social services in different ways. This means that, in order to achieve the exchange of information, ACIVIT has developed translation libraries from one data model to another, but always seeking to exchange the maximum amount of information available between the files and the application.
- **Data governance:** in the processes that synchronise the existing information in ACIVIT and that in the RESISOR repositories, it was considered which system is the data owner of the various social files of a user. In this way, ACIVIT will always overwrite in the repositories the most current data of those social files it owns, while in ACIVIT the data that are owned by other applications will be overwritten (such as the civil partnerships, degree of dependence,) or those that do exist in ACIVIT or in the repositories. Under no circumstance will ACIVIT modify in the repositories the records concerning the data which it does not own. This mechanism guarantees that the most up-to-date information is always available in the repositories, and that ACIVIT has the most complete and reliable information possible.

<sup>66</sup> Entregable RES0001E\_DDS.Definicion\_Funcional\_Acivit\_CORE\_0103

#### 3.3.2.4.3.4.- Migration

The main tasks of the final phase of work are the migration or upload of data and user training, although there were also different implementations in the City Council, as well as of final test plans, before the final production began.

First, in this last phase, the configuration of the data exploitation module was finalised, allowing users to obtain the following types of different reports: general system information, personal files, files, technical interventions and information about the intervention programmes.

Also, the uploading of data from the SSUIS status tool was finalised, so that the City Council could start working with ACIVIT with its information already uploaded and, therefore, be able to provide continuity to the works.

In the same way, all the document templates that should be generated directly by the system within the procedures were uploaded to ACIVIT.

The implementation of ACIVIT in the City Council took place prior to the user training.

#### 3.3.2.4.3.5. Training

As a final step, prior to beginning production, various training sessions were held for those persons who were going to be using ACIVIT. The training sessions held were organised in the following way:

- System administrator staff: one session was held.
- Social work, social education, psychology and administration professionals: 4 sessions plus one session for the resolution of doubts.
- Social work, social education, psychology and administration professionals: 1 session for using the viewer for professionals of the ESSR.

In these training sessions, the 12 persons from the City Council who will be the final users of the system participated. In the same way, 3 professionals from the RMESP participated.

The social work, social education, psychology and other professionals of the Community Social Services of the ESSR will have available to them:

- A basic data record of the users and of the family unit that is accessible from any computer.
- A programmed record which allows for a comprehensive view of the case.
- A data log that collects the dynamic aspects of the problematic situation, as well as the correlation of the variables that make it up.
- A record that gathers all of the qualitative elements of the user such as aptitudes, attitudes, values, etc. These elements are key when it comes time to design the intervention strategy and to mobilise the user's own abilities to deal with the problematic situation.
- The basic information of users in their access to the specialised social services.

In addition to being an important instrument for **collecting and recording information**, because it synthesises and analyses the social situation of the person and their nuclear family, it is also an essential tool for the **diagnosis** and planning of the social intervention road map with person. This planning component should enable the centralisation of the social intervention processes with the user and have a comprehensive vision of their needs; and, should not be inclined to treat the different benefits and/or social services in an isolated manner.

The ESSR provides professionals with the basic data to prepare the social intervention project, that is, it allows the marking of the operative objectives, the resources that are needed, the activities to be carried out, the necessary negotiations, the user's commitment, the schedule of the intervention and evaluation periods and procedures; as well as the necessary diversions to programmes and/or external resources, noting the proposed reasons and obtained results. But it also requires the commitment of the professional who uses it to keep the information alive, continuously updating it<sup>97</sup>.

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<sup>97</sup> GARCÍA T. 4.1. La historia social como instrumento documental básico. En: *Centros de servicios sociales del Ayuntamiento de Madrid: Criterios organizativos para la mejora de la atención social área de servicios sociales Madrid*. Comunicaciones. 4.1. MADRID. 2000; 139-145. URL: <http://www.madrid.es/UnidadesDescentralizadas/ServALaCiudadania/SSociales/Publicaciones/CriteriosOrganizativosParaMejora/TrabSocialZona04.pdf>

#### 3.3.2.4.4. TEAMWORK

In this level, the ESSR as a tool goes further than its individualised nature and is gaining weight in the accumulative aspect of the data logged in the set of the Social Records. The analysis of the different Zone, Neighbourhood or District Social Records offers us a complete panorama of what is happening in that Zone, Neighbourhood or District, in a particular aspect or as a whole, and it is offered individually to the social work professionals of the Basic Zone of Social Services, as well as to the entire team of professionals.

The use of the same instrument allows the whole team to have an approved language in the analysis of variables, helps to homogenise actions and to share experiences, and to accumulate the knowledge of the social reality for all the members of that team<sup>88</sup>.

It is important to keep in mind the simultaneity in the process of using the instrument in different cases, zones, neighbourhoods, etc., such as the feedback on all its information obtained by all of the professionals on the team.

The mere fact of universalising situations from individual cases implies a dynamic team activity, enabling them to:

- Make comparisons.
- Present new experiences.
- Raise doubts.
- Learn from others.
- Create common action criteria.
- Etc.

#### 3.3.2.4.5.- REGARDING THE SERVICE PROVIDERS

In the PSSS, the relationship with the service providers is a key and complex process. A high percentage of the social services are state subsidised, and the number of these entities, public and private, is significant. The ESSR should have a section of information shared with the same in order to accelerate, among other things:

- The monitoring and evaluation of the persons cared for.
- The management of payments.

Within the RESISOR project, a Minimum Data Set has been defined for the Day Centre Service and the Monitoring of the Person in Residential Care that allows the providers to interconnect their Information Systems with the ESSR through the interoperability BUS. Through this MDS, the providers can complete the transfer of the necessary information so that the Agency staff can evaluate the monitoring of the person in the centre and perform the economic management of the service.

The definition of this Minimum Data Set for the Day Centre Service and the Monitoring of the Person in Residential Care was carried out by a working group made up of personnel from the RMESP, ASSDA, the Sopra company and the DomusVI entity.

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<sup>88</sup> GARCÍA T. 4.1. La historia social como instrumento documental básico. En: *Centros de servicios sociales del Ayuntamiento de Madrid: Criterios organizativos para la mejora de la atención social área de servicios sociales Madrid*. Comunicaciones. 4.1. MADRID. 2000; 139-145. URL: <http://www.madrid.es/UnidadesDescentralizadas/ServALaCiudadania/SSociales/Publicaciones/CriteriosOrganizativosParaMejora/TrabSocialZona04.pdf>

### 3.3.2.6. EVIDENCE

During the design phase of WP2 the following deliverables were generated:

**Table 2: Software developed for the ESSR RESISOR v1 platform - WORK PACKAGE 2 (WP2) and 3 (WP3).**

<p><b>WEB SERVICES</b></p> <ol style="list-style-type: none"> <li>1. Users and Social Files Services</li> <li>2. Professional Services</li> <li>3. Parametric Services</li> <li>4. Resource Services</li> <li>5. SSR outline Services</li> <li>6. Centre User Services</li> <li>7. Centre Closing Services</li> <li>8. Centre Management Services</li> <li>9. Centre Stays Services</li> <li>10. Centre Payment Services</li> <li>11. Monitoring Persons Services</li> </ol>
<p><b>CONFIGURATION AND PUBLICATION OF SERVICES IN BUS</b></p> <ol style="list-style-type: none"> <li>1. Users and Social Files Services for ESB 4.8</li> <li>2. Users and Social Files Services for ESB 6</li> <li>3. Professional Services for ESB 4.8</li> <li>4. Professional Services for ESB 6</li> <li>5. Parametric Services for ESB 4.8</li> <li>6. Parametric Services for ESB 6</li> <li>7. Resource Services for ESB 4.8</li> <li>8. Resource Services for ESB 6</li> <li>9. SSR outline Services for ESB 4.8</li> <li>10. SSR outline Services for ESB 6</li> <li>11. Centre User Services for ESB 6</li> <li>12. Centre Closing Services for ESB 6</li> <li>13. Centre Management Services for ESB 6</li> <li>14. Centre Stays Services for ESB 6</li> <li>15. Centre Payment Services for ESB 6</li> <li>16. Monitoring Persons Services for ESB 6</li> </ol>
<p><b>APPLICATIONS.</b></p> <ol style="list-style-type: none"> <li>1. SSR Viewers</li> <li>2. Professional and user management application.</li> <li>3. Desktop processing application.</li> <li>4. jBPM Procedures - Children lacking protection.</li> <li>5. jBPM Procedures - Dependency and recognition of degree.</li> <li>6. Day Centres Management management application.</li> <li>7. jBPM Procedures - Economic management of the Day Centres service.</li> <li>8. Monitoring for Residential Care management application.</li> <li>9. CAS (Single Sign On) Application configured for Day Centres and Residential Care.</li> </ol>
<p><b>DATABASE SCRIPTS.</b></p> <ol style="list-style-type: none"> <li>1. Professionals, Users, Resources, SSR outlines and parametrics DB creation scripts.</li> <li>2. Resources, Professionals, parametrics and SSR configuration data uploading scripts.</li> <li>3. DB creation script for the management of day centres and residential care.</li> <li>4. Data uploading script for the pilot centres.</li> </ol>

**Table 3: Hardware for the ESSR RESISOR v1 platform: WORK PACKAGE 2 (WP2):**

<p><b>STORAGE.</b></p> <ul style="list-style-type: none"> <li>• 160 TB of SAN net storage (databases).</li> <li>• 79 of NAS net storage (files).</li> <li>• 14.2% in SSD (solid state with much higher performance).</li> <li>• Performance of 180,000 IOPs (Input/Output Operations Per Second).</li> <li>• Response time of 2.01 ms.</li> <li>• Backup copy, safeguard and recovery system.</li> <li>• 34 TB on disk.</li> <li>• 120 TB on tape.</li> </ul> <p><b>HIGH AVAILABILITY AND LOAD SHARING BALANCERS.</b></p> <ul style="list-style-type: none"> <li>• Data capacity for 6.4 million concurrent sessions in L4 (transport layer).</li> <li>• 30 Gbps bandwidth processing.</li> </ul> <p><b>FIREWALL SECURITY AND INTERNAL MONITORING DEVICES.</b></p> <ul style="list-style-type: none"> <li>• Capacity for 11 million concurrent sessions.</li> <li>• 52 Gbps of bandwidth processing.</li> <li>• Lag time of 3 microseconds.</li> </ul> <p><b>HYPERCONVERGENCE SYSTEM FOR PROVIDING SERVICES TO LOCAL ENTITIES THAT NEED IT (ACIVIT IN CLOUD MODE).</b></p> <ul style="list-style-type: none"> <li>• 3 nodes with 2 CPUS per node, of 6 processors per CPU and 128 GB of memory per node.</li> <li>• 2.88 TB in SSD storage.</li> <li>• 48 TB in non-SSD (SAS) storage.</li> </ul> <p>NOTE: Given that in the EaSI call it was not allowed as an eligible expenditure the purchase of computing infrastructure, but this was essential in order to be able to address with guarantees the implementation of the platform for its piloting, it was necessary to request additional sources of financing (ERDF) in order to acquire the complementary equipment.</p>
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**Table 4: Complementary technological projects developed and integrated with the ESSR RESISOR v1: WORK PACKAGE 2 (WP2)**

<p><u>GIS MODULE</u></p> <p>For the GIS (geo-positioned information system) module of the RESISOR Project, the completely new Social Services of Andalusia Resource Map was developed, accessible online, (<a href="https://www.serviciosocialesandalucia.es/mapa-servicios-sociales">https://www.serviciosocialesandalucia.es/mapa-servicios-sociales</a>) and from a mobile app (<i>Servicios Sociales de Andalucía</i>) which enables the information of the map to be displayed on both IOS and Android mobile devices.</p> <ol style="list-style-type: none"> <li>1. It is being implemented in a highly redundant infrastructure which allows for high availability, as well as the capacity to absorb a large number of user sessions.</li> <li>2. It is a collaborative project based in the corporate technology of the Regional Government of Andalusia. <ul style="list-style-type: none"> <li>o Mape@ presentation and display services of the Regional Ministry of Economics, Finance, and Public Administration.</li> <li>o Geopositioning, street directory services and layers of data (demographics, etc.) of the Institute of Statistics and Cartography of Andalusia.</li> </ul> </li> </ol> <p><u>CONFIDENTIALITY AND TRACEABILITY SYSTEM</u></p> <p>In order to maximise security, confidentiality and guarantee of access to the information, the platform was integrated with corporate identification systems from the Regional Government of Andalusia.</p> <ol style="list-style-type: none"> <li>1. ProxyCl@ve for Citizens. <ul style="list-style-type: none"> <li>o Based and working on the Cl@ve system of the General State Administration.</li> <li>o It allows for multiple levels of security in the authentication in accordance with the provisions of Royal Decree 3/2010 of 8 January of the National Security Framework according to the security levels of information accessed.</li> </ul> </li> <li>2. SSOWeb (corporate LDAP) for professionals of the different bodies of the Regional Government of Andalusia.</li> <li>3. CAS for professionals from other organisational fields, fundamentally in the local entities (such as Dos Hermanas), private service companies (such as DomusVI) and entities from a tertiary sector.</li> </ol>
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**Table 5: Project reports drafted by the members of the WP2 and WP3 working groups of the RESISOR Project: DEVELOPMENT OF THE RESISOR v1 SOFTWARE TOOL AND PILOT.**

1. ORDÁS FJ, DOMÍNGUEZ J, DIEGO ORTIZ J, PÉREZ M, ROMERO C, GONZÁLEZ DE LA HIGUERA MR, JIMÉNEZ MC, LÓPEZ R, SANTIAGO AL, MUÑOZ O. Definición detallada de requisitos – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
2. JARA OLIVER M, FERNÁNDEZ PONTIVEROS DJ. Definición Detalla de Requisitos P2 – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
3. ORDÁS FJ, DOMÍNGUEZ J, DIEGO ORTIZ J, PÉREZ M, ROMERO C, GONZÁLEZ DE LA HIGUERA MR, JIMÉNEZ MC, LÓPEZ R, SANTIAGO AL, MUÑOZ O. Análisis orientado a Objetos – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
4. JARA OLIVER M, FERNÁNDEZ PONTIVEROS DJ, YAGÜE MARTIN-LUNAS C. Análisis orientado a Objetos P2 – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
5. ORDÁS FJ, DOMÍNGUEZ J, DIEGO ORTIZ J, ROMERO C, LÓPEZ R, SANTIAGO AL, MUÑOZ O. Documentos de diseño del sistema – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
6. FERNÁNDEZ PONTIVEROS DJ, YAGÜE MARTIN-LUNAS C. Documentos de diseño del sistema P2 – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
7. LÓPEZ R, ORDÁS FJ, DOMÍNGUEZ J, NAVAS J, SANTIAGO AL. Catálogo de servicios web – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
8. JARA OLIVER M, FERNÁNDEZ PONTIVEROS DJ, YAGÜE MARTIN-LUNAS C. Catálogo de servicios Web P2 – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
9. LÓPEZ R, ORDÁS FJ, DOMÍNGUEZ J, NAVAS J. Documento de ficha de servicios de profesionales – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
10. LÓPEZ R, ORDÁS FJ, DOMÍNGUEZ J, NAVAS J. Documento de fichas de servicio de recursos – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
11. LÓPEZ R, ORDÁS FJ, DOMÍNGUEZ J, NAVAS J. Documento de ficha de servicio de personas usuarias – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
12. LÓPEZ R, ORDÁS FJ, DOMÍNGUEZ J, NAVAS J. Documento de ficha de servicio de paramétricas – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
13. ORDÁS FJ, DOMÍNGUEZ J, NAVAS J. Documento de ficha de servicio de HSU – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
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15. PÉREZ M, CALVENTE A, CABALLERO MJ. Manual del Escritorio de tramitación y procedimiento de menores – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
16. CLAMAJIRAND J, JIMÉNEZ MC. Manual del procedimiento de dependencia – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
17. AGUILAR S, DOMÍNGUEZ J, ORDÁS J. Manual del visor de la HSU – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
18. NAVAS J, LÓPEZ D. Manual de la aplicación de gestión – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
19. EL GHAFUOD H. Manual de persona usuaria del sistema para P2 – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
20. MUÑOZ O. Manual de instalación de suite de jBPM – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
21. JARA OLIVER M, YAGÜE MARTIN-LUNAS C. Manual de instalación y configuración del Sistema para P2 (incluyendo jBPM 6.4 y CAS como solución SSO para SAR y CD) – Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
22. PÉREZ M, CABALLERO MJ, CALVENTE A. Manual de plan de pruebas del servicio de personas usuarias y Fichas Sociales - Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
23. PÉREZ M, CABALLERO MJ, CALVENTE A. Manual de plan de pruebas del servicio de profesionales - Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
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26. PÉREZ M, CABALLERO MJ, CALVENTE A. Manual de plan de pruebas del servicio de apuntes HSU - Documento técnico Proyecto RESISOR. Consejería de Igualdad y Políticas Sociales. SEVILLA. 2018.
27. ISOTROL. Definición funcional ACIVIT y Manuales de uso – RESISOR v1. SEVILLA. 2018.
28. ISOTROL. RES0001E\_DDS.Definición\_Funcional\_Acivit\_CORE\_0103 – RESISOR v1. SEVILLA. 2018.
29. ISOTROL. RES0001E\_DDS.Definición\_Funcional\_Acivit\_Solicitud\_Valoracion\_Dependencia\_0100 – RESISOR v1. SEVILLA. 2018.
30. ISOTROL. RES.E.DDS.Definición\_Funcional\_Acivit\_ProgramadeTratamientoFamiliar\_0100 – RESISOR v1. SEVILLA. 2018.
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33. ISOTROL. RES0001E\_MUS\_Manual de Administración módulo Profesional Acivit\_0100 – RESISOR v1. SEVILLA. 2018.
34. ISOTROL. RES0001E\_MUS\_Manual de Uso Acivit Agenda\_0101 – RESISOR v1. SEVILLA. 2018.
35. ISOTROL. RES0001E\_MUS\_Manual de Uso Acivit Ficha Personal\_0101 – RESISOR v1. SEVILLA. 2018.
36. ISOTROL. RES0001E\_MUS\_Manual de Uso Acivit PRISO\_0100 – RESISOR v1. SEVILLA. 2018.
37. ISOTROL. RES0001E\_MUS\_Manual de Uso Acivit Proyectos y Actividades\_0101 – RESISOR v1. SEVILLA. 2018.
38. ISOTROL. RES0001E\_MUS\_Manual de Uso del Módulo de Entidades Colaboradoras ACIVIT\_0101 – RESISOR v1. SEVILLA. 2018.
39. ISOTROL. RES0001E\_MUS\_Manual de Uso del Módulo de Mensajería ACIVIT\_0101 – RESISOR v1. SEVILLA. 2018.
40. ISOTROL. RES0001E\_MUS\_Manual de Uso del Módulo de Reuniones ACIVIT\_0101 – RESISOR v1. SEVILLA. 2018.
41. ISOTROL. RES0001E\_MUS\_Manual de Uso Expediente familiar\_0101 – RESISOR v1. SEVILLA. 2018.
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45. ISOTROL. RES0001E\_MUS\_Manual del módulo Profesional Acivit\_0101 – RESISOR v1. SEVILLA. 2018.
46. ISOTROL. RES0001E\_PFO\_Planificacion\_Formacion\_0200 – RESISOR v1. SEVILLA. 2018.

In a complex system born from the interoperability of existing and new systems, it holds special importance, in addition to the interoperability administration, the data administration in order to ensure that, in any case, the data circulated by the system meet the requirements of the **guarantee of origin, veracity, efficacy and validity**. It is, therefore, essential to define the **authoritative sources** of each datum and the procedures of validation, dissemination and updating data to ensure that at all times the data is valid and updated while not corrupted by changes from unreliable sources or not validated and transmitted, once updated, to all those systems for which it is necessary. In the same way, it is crucial to create a **small semantic domain of the exchanged data** in order to ensure that these are transmitted without losing their context or meaning among the different systems and bodies involved.

From the first design stages of WP2, special attention has been paid to the **evaluation of compliance with NSF, LOPD<sup>99</sup>** and its development standard<sup>100</sup>. In the final stage, in compliance with **GDPR<sup>101</sup>**, by which is abolished the Directive 95/46/CE (General data protection regulation), carrying out a **detailed study of COMPLIANCE, RISK ANALYSIS AND IMPACT ASSESSMENT** of the threats in the realm of the RESISOR Project.

### 3.4 PILOTING.

In the RESISOR project, the validation of the tool and the work models used for its development, as well as for piloting, had as a demonstrator at the local level the partner entity of the project, the CITY COUNCIL OF DOS HERMANAS. In the area of service providers, it was done in 3 residences from different DomusVI locations (Seville, Cordoba and Malaga) and in the field of Territorial Delegation was that of the province of Seville.

In the project design it was considered that, in this stage of the tool, the operation and the procedures of the Provincial Councils were assimilable to those of the City Councils of more than 20,000 inhabitants. Of all the procedures in the field of social services covered by the ESSR, the pilot stage of the ESSR was carried out over the following procedures:

- P1. Procedure for the recognition of the situation of dependence.
- P2. Procedure for day centres and residential care services.
- P3. Procedure for the assessment of the situation of children lacking protection.

On 30 April 2018 the **Acivit System** (Community Social Services Information System) **pilot began** in the City Council of Dos Hermanas, the application scope of which extended to 6 UTS (Units of Social Work) of the aforementioned body (UTS VISTAZUL, UTS MONTECILLOS, UTS MONTEQUINTO, UTS CORCHUELA, UTS PARQUE, UTS IBARBURU). Said pilot finalised in the month of October 2018.

The **pilot and implementation phase of the 3 selected procedures** (P1 Recognition of the situation of dependence; P2 Day Centres and Residential Care, and P3 Procedure for the Assessment of the Situation of Children Lacking Protection) was carried out over 6 months, from April to September 2018. The DomusVI centres for the P2 piloting were ISDABE (Estepona, Malaga), Remedios (Aguilar de la Frontera, Cordoba) and Santa Justa (Seville).

Beforehand, and with the aim of facilitating the use of the software tool, an **in-person training** was held during 5 days for all of the users of the system in the aforementioned headquarters of Dos Hermanas, and subsequently, on the 4 and 5 July 2018 another training was held, with the aim of showing the integration of the Acivit system with the ESSR and the functionalities of the Professional Viewer module.

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<sup>99</sup> Ley Orgánica 15/1999 de 13 de diciembre de Protección de Datos de Carácter Personal).

<sup>100</sup> Real Decreto 1720/2007 de 21 de diciembre.

<sup>101</sup> Reglamento 2016/679 del Parlamento Europeo y del Consejo, de 27 de abril de 2016, relativo a la protección de las personas físicas en lo que respecta al tratamiento de datos personales y a la libre circulación de estos datos.





Fig. 10. WP3 Roadmap for the piloting of the tool ESSR-P1 of Andalusia

Online training courses were also designed.

1. Course for the assessment of the situation of children lacking protection in the ESSR of Andalusia.
2. Course for managing community social services - ACIVIT.
3. Course for management procedures of day centres and residential care in the ESSR.

In July, the piloting of the procedure of day centres in the DomusVI and the piloting of the procedure for child abandonment and recognition of the situation of dependence in the Central Services and the Provincial Delegation of Seville also began. Similarly, the corresponding period of prior training was completed.



Fig. 11. Course 1: Procedure for the assessment of the situation of children lacking protection in the ESSRA.

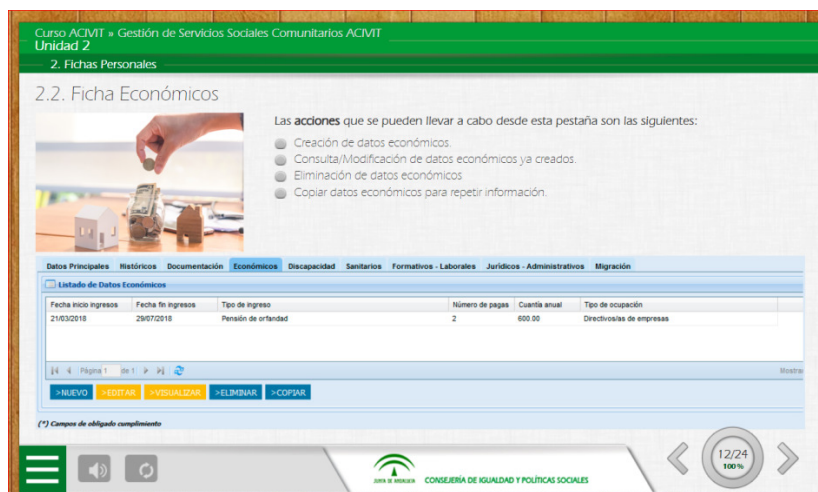


Fig. 12. Course 2: Community Social Services Management with ACIVIT

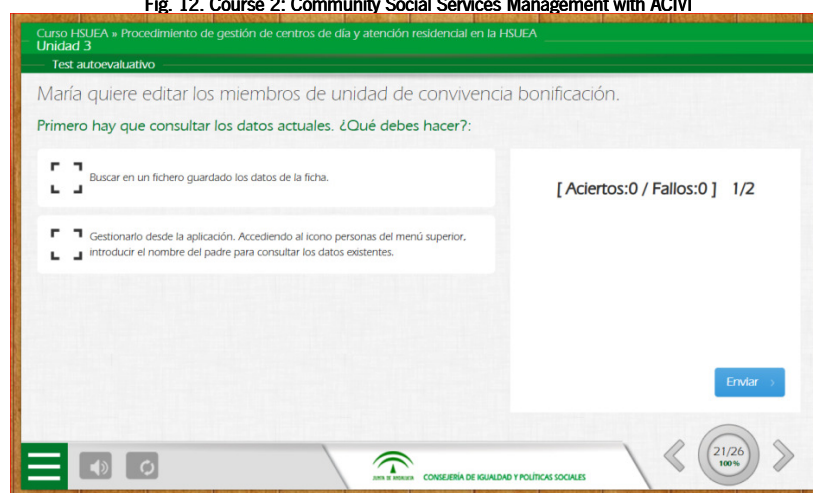


Fig. 13. Course 3: Management procedure of day centres and residential care in the ESSRA.

### 3.4.1. P1 - PROCEDURE FOR THE RECOGNITION OF THE SITUATION OF DEPENDENCE.

The procedure for the recognition of the situation of dependence is directed at the rationalisation, modelling and automation of the recognition of the situation of dependence<sup>102</sup>. This administrative procedure considers the situation of dependence from the **presentation of the application** to the **resolution of recognition**. According to the content of this resolution, one may proceed to begin the processing of the approval procedure of the corresponding **Individual Care Programme (PIA)**.

Regarding the **functionality** of what was implemented for the piloting, it is worth noting the following activities:

- Recording and receipt of applications for recognition of the situation of dependence.
- Validation of attached documentation and consolidation.
- Assignment of approved persons.
- Summons for assessment.
- Assessment of Scale.
- Judgement.
- Resolution (preparation and signatures).
- Issuance of documentation.

Regarding the **piloting process**, the following stages were completed:

- Training session for Central Services.
- Training session for the Territorial Delegation of Seville.

<sup>102</sup> Decreto 168/2007, de 12 de junio, por el que se regula el reconocimiento de la situación de dependencia y del derecho a las prestaciones del Sistema para la Autonomía y Atención a la Dependencia, así como los órganos competentes para su valoración'

- Piloting period.

During the pilot stage, the users in charge of the same conducted queries of **updating and procedural improvements**, which were addressed during the same pilot phase period.

The start of production and, therefore, the piloting of ACIVIT in the City Council were done in two phases:

- Phase 1: Complete functional use of ACIVIT, without being connected to the SSR through the interoperability BUS.
- Phase 2: Automatic interconnection with the SSR through the BUS.

The first phase began 30 April 2018 and four months later the volume of information that had been uploaded in ACIVIT was the same:

- Number of social files: 100
- Total of persons from social files: 220
- Procedure with children: 1
- Procedure for the assessment of dependence: 10
- Total number of SIP: 319
- Number of SIP members: 429
  - Men: 148
  - Women: 279

The second phase, which already considered the integration of ACIVIT with the SSR, began 24 August and required a series of more complex tests as there was more than one information system and more work equipment involved. Furthermore, the fact of not starting the two phases at the same time, meant that phase two, in turn, had the important initial milestone of synchronising all the information that had been generated in ACIVIT without a pre-existing connection with the BUS.

In this respect, prior to activating the synchronisation in production, the following tests were completed:

- Synchronisation test between the development environment of ACIVIT and that of BUS. It was done in the environment of the companies; therefore they used not-real data from the users.
- Synchronisation test between the PreProduction environment of ACIVIT of the City Council and the PreProduction environment of the BUS of the RMESP.

Furthermore, a training course aimed at the users was held, in which the previous ACIVIT training was completed with a more specific one oriented towards integration with the SSR and its impact on the Viewer implemented within the project.

Once the synchronisation was activated in production, all of the aforementioned information managed in ACIVIT, and more than 21,000 persons whose data originated from the SSUIS status tool were uploaded in the SSR.

### 3.4.2. P2 - PROCEDURE FOR DAY CENTRES AND RESIDENTIAL CARE SERVICES.

This procedure is focused on both the managing entities of the day centres and residential care and the ASSDA professionals, so that each one will participate in a specific part of the procedure. A **training session** was also held about the application for Day Centres for the users in charge of the piloting.

Day centre and residential care professionals incorporated the monitoring information of the beneficiaries of the Day Centres and Residential Care services that were in the centres in the period from May to October 2018. This information was collected through the **web management application** developed as a part of the P2, by means of a series of questionnaires with indicators that are qualified, measured, and analysed for each beneficiary, for purposes of providing a better service. The monitoring of the beneficiary measured, among others, their adaptation to the centre, fulfilment of goals, satisfaction and the individual care plan prepared by the team of professionals in the centre.

In the specific case of **Day Centres**, as part of the procedure the need to collect that information which allows the service to be paid for monthly is covered. For this, the web management application developed in the P2 provides

support for the management of payments, organising the process in phases and stages, making competent professionals intervene in every phase of the process in order to properly finalise the payment.

In order to be able to carry out the piloting in the DomusVi centres, pertaining both to the services of Day Centres and Residential Care, the beneficiaries who currently receive the services in those centres have been uploaded to the application.

In the case of Day Centres, to pay for the service, DomusVi incorporated into the system the new persons who began receiving the service during the pilot period, the losses that have occurred, as well as the possible absences that could have occurred in said period.

For the DomusVi Day Centre team to be able to incorporate new persons into the centre, the Territorial Services of the ASSDA previously preassigned those persons to the centre, confirming the assignation by means of a PIA resolution.

As part of the pilot stage, services have been published on the BUS platform that are integrated with the DomusVi systems, so that their team of professionals can also consult the persons pending entry into the centre from their own information system, as well how to communicate their entry in the centre, absences, provide tracking information, etc...

### 3.4.3. P3 - PROCEDURE FOR ASSESSING THE SITUATION OF CHILDREN LACKING PROTECTION

This procedure is based on the information incorporated in the process file prepared in Work Package 1, in addition to the information on the circuit that is currently in production in the ISSS. On the other hand, the analysis and modelling of the procedure in Resisor has focused on the improvement in the automation of the procedure, the simplification, the guarantee of continuity in the users' care and, as far as possible, the reduction of the terms of total execution, or at least those phases in which the minors require immediate attention.

The scope of the modelling in Resisor considers the complete assessment, including, when applicable, the phase of **Provisional Guardianship** and **Prior Information**. Therefore, the process includes the phases of:

- Provisional Guardianship.
- Prior information.
- Abandonment procedure:
  - Start.
  - Instruction.
  - Resolution.
  - Objection.

### 3.5 EVALUATION

The rationalisation in the assignation of resources and the attainment of expected results of the social policies need instruments and procedures that can measure, compare and contrast the gains made with the desired objectives<sup>103</sup>. The planned intervention processes need to be evaluated in order to offer comprehensive information about their results and impact.

The majority of the methods and tools for **social impact measurement** share a general structure collected in the **Practical guide to measuring and managing impact**<sup>104</sup>, published by the Spanish Association of Foundations, adapting the original version of the same to the social reality in Spain<sup>105</sup>. The **EVPA Guide** is a document that synthesises the best practices in impact measurement in five steps presented sequentially. Furthermore, they are the steps used in the **European Standard on Impact Measurement**<sup>106</sup> agreed upon by the European Commission in 2014. The

<sup>103</sup> COHEN E, FRANCO R. Evaluación de proyectos sociales. Siglo XXI. 1992.

<sup>104</sup> HEHENBERGER L, HARLING AM, SCHOLTEN P. A Practical Guide to Measuring and Managing Impact. Ed. EVPA. 2013. URL: [http://www.fundaciones.org/EPORTAL\\_DOCS/GENERAL/AEF/DOC-cw5537916e2a002/Gula\\_impacto-EVPA-AEF-2015.pdf](http://www.fundaciones.org/EPORTAL_DOCS/GENERAL/AEF/DOC-cw5537916e2a002/Gula_impacto-EVPA-AEF-2015.pdf)

<sup>105</sup> DEL RÍO E. Guía práctica para la medición y la gestión del impacto. Asociación Española de Fundaciones. MADRID: 2105.

<sup>106</sup> COMITÉ ECONÓMICO Y SOCIAL EUROPEO. Dictamen del Comité Económico y Social Europeo sobre el tema "Medición del impacto social". Ponente: Ariane Rodert. INT/721. Bruselas. 2013. URL: <http://www.eesc.europa.eu>

methodological strategy that was designed for the piloting of the RESISOR project is an adaptation of this guide, considering the following phases:

1. Set objectives.
2. Analyse the stakeholders involved.
3. Measure the results.
4. Verify and assess the impact.
5. Follow-up and presentation of the results.

Within the framework of the Agreement of 26 November 2015 between the **IUA** and the **RMESP**, in which both entities establish a Shareholders Agreement for the **RESISOR** project, the IUA undertakes to continually evaluate the design, development and implementation (piloting) process and assessment of the impact of this public intervention for the construction of the **ESSR**.

To initiate the external assessment actions, as of February 2016, the IUA established the criteria for the selection of research personnel from Andalusian universities with educational connections in the field of Social Work and Social Services. A **panel of experts** linked with the **Universities of Huelva, Jaen, and Pablo de Olavide (Seville)** was formed. This panel was in charge of guiding both the assessment of the process and the impact of the intervention.

After setting and defining the project objectives (see point 3.1) and the agents involved (see point 2.2.), a distribution of the main tasks of the evaluation was made and an entity responsible for its coordination was determined before the panel of experts.

1. **IUA** – Preparation of the Logical Framework of Indicators (LFI)
2. **University of Huelva** - Assessment of the importance of the intervention.
3. **University of Jaen** - Analysis of the feasibility of the implementation of the ESSR.
4. **Pablo de Olavide University** - Design of the controlled test.

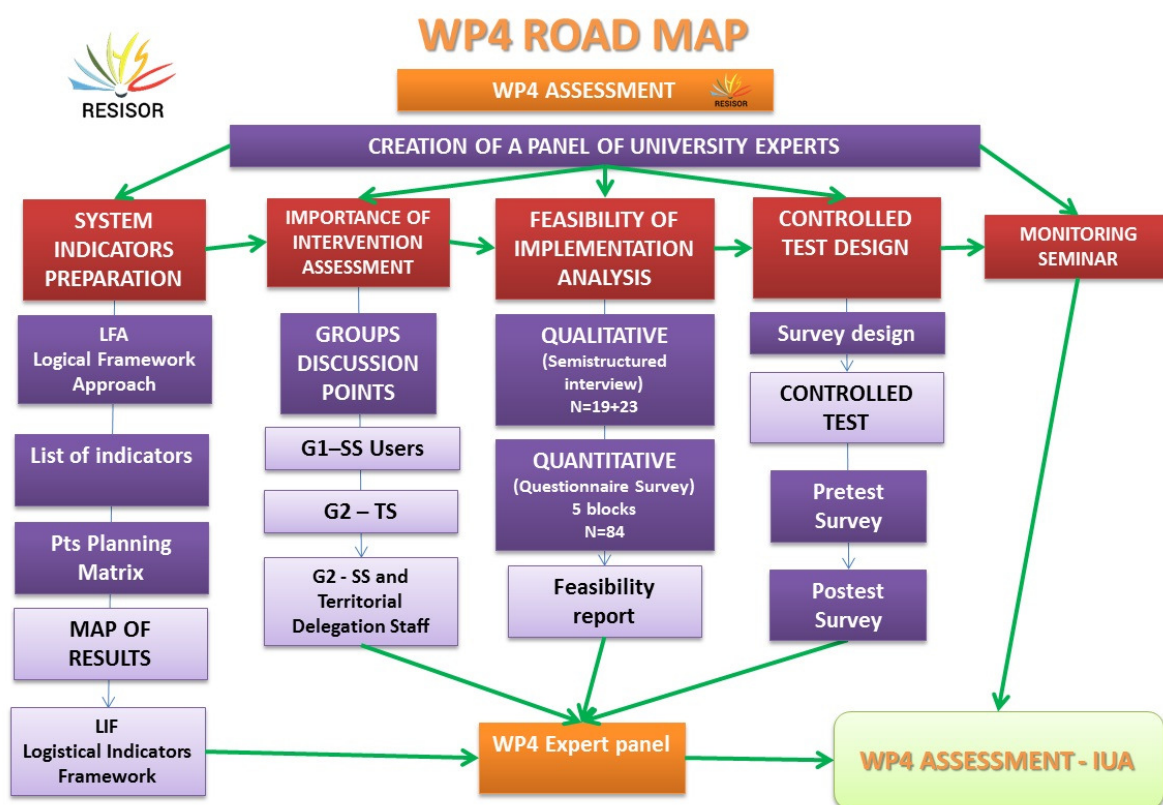


Fig. 14. WP4 Roadmap for the for the evaluation and monitoring of the RESISOR Project.

### 3.5.1. ELABORATION OF THE SYSTEM OF INDICATORS, RESULTS MAP AND EVALUATION OF THE DIFFERENT WORK PACKAGES. LOGICAL FRAMEWORK OF INDICATORS (LFI) METHODOLOGY PROPOSAL (WP4).

In order to collect and build the **system of indicators**<sup>107</sup> that allows for determining the degree to which the purpose, objectives are achieved, and estimating the productivity and/or efficiency of the **RESISOR project**, these must meet the necessary conditions of independence, verifiability, validity and accessibility<sup>108</sup>.

In-person and virtual work sessions were conducted in order to make the proposal using the Logical Framework Approach (EML) methodology<sup>109</sup>.

The system of indicators of the RESISOR project takes into account the following criteria<sup>110</sup>.

- **Efficacy:** to what extent the proposed objectives have been achieved.
- **Efficiency:** what results were attained and with what means. Degree of optimisation of the use of resources.
- **Relevance:** the pertinence of the results and objectives of the intervention to the context in which it is carried out and the needs.
- **Feasibility / Sustainability:** Estimate of the ability to continue the actions autonomously.
- **Impact:** Positive and negative, expected and unexpected effects that the action had on the means.

The **system of indicators**<sup>111</sup> enables the planning and execution directed at the objectives to be analysed and a **planning matrix** is generated for each work package of the RESISOR project.

The **map of results** establishes the optimal parameters for the indicators of each one of the actions. It is necessary to keep in mind that the expected results are what the project can guarantee as a consequence of its activities. The activities or projects carried out are not results; the results are the benefits or real effects of the activities or projects carried out.

The final product is an analytical tool that we call the **Logical Framework of Indicators (LFI)**, that for the RESISOR project was described in a first report focused on the WPO, WP1, WP4 and WP5.<sup>112</sup> That was later completed with a second report where the effectiveness and results indicators related to the technological and piloting section of the WP2 and WP3 tool of the RESISOR project were listed<sup>113</sup>.

The generated matrix that summarises the work logic contains a vertical that makes it possible to see the different levels of planning, objectives, expected results and activities and a horizontal one that describes the proposed indicators to measure the development of the project. The matrix emerges as an intertwined synthesis of each of the planning elements of the RESISOR project.

Once the indicators system and the results map of the project were designed, the next phase of the evaluation process was carried out, using a **method of data triangulation** where the results obtained were combined through **the observation of the participants, the discussion groups, interviews and questionnaires**.

<sup>107</sup> PALOMARES-MONTERO D, GARCÍA-ARACIL A, CASTRO-MARTÍNEZ E. Evaluación de las instituciones de educación superior: revisión bibliográfica de sistema de indicadores. Revista Española de Documentación Científica, 2008;31(2):205-229.

<sup>108</sup> AGUILAR IDANEZ MJ, ANDER-EGG E. Evaluación de servicios y programas sociales. Editorial Lumen. Argentina. 1994.

<sup>109</sup> ROSENBERG LJ, POSNER LD. The Logical Framework: A Manager's Guide to a Scientific Approach to Design and Evaluation (USAID Document PN-ABN96382060. WASHINGTON, DC. 1979.

<sup>110</sup> GONZALEZ GOMEZ L. La evaluación en la gestión de proyectos y programas de desarrollo: una propuesta integradora en agentes, modelos y herramientas. Servicio Central de Publicaciones del Gobierno Vasco. VITORIA- GASTEIZ. 2005.

<sup>111</sup> RODRÍGUEZ M, SCAVUZZO, J, TABORDA A. Metodología integral de evaluación de proyectos sociales: indicadores de resultados e impactos (2a. ed.). Ed Brujas, CÓRDOBA. 2017.

<sup>112</sup> MUÑOZ DE DIOS M, DE LA FUENTE Y, DÍAZ JIMÉNEZ R, HERRERA R, CORONA AGUILAR A, MARTÍN CANO C, PÉREZ VILLAR J, VÁZQUEZ AGUADO O, RELINQUE MEDINA F, BORREGO Y. RESISOR: Contraste del sistema de indicadores y mapa de resultados. UNIA. SEVILLA. Septiembre de 2016. Revisado en febrero de 2017. Revisado en abril de 2017.

<sup>113</sup> AYESA, SOPRA STERIA, ISOTROL. RESISOR: Informe de los indicadores del PT2 y PT3. SEVILLA. 29/01/2018.

### 3.5.2. ASSESSMENT REGARDING IMPORTANCE OF THE INTERVENTION OF THE ESSR - FOCUS GROUPS (WP4).

The **discussion groups (DG) - Focus Group**<sup>114</sup>, as a qualitative research technique, are used primarily to gather data related to the opinions, beliefs, perceptions, interests and attitudes of a group of people, involved in a given object of study, with common characteristics, with a moderator, and with the objective of obtaining information on the specific topic, in a specific space and time<sup>115</sup>. It is *"a socialised conversation project, in which the production of a group communication situation serves to capture and analyse the ideological discourses and symbolic representations that are associated with any social phenomenon"*<sup>116</sup>.

The external characteristics refer to those necessary requisites in order for a discussion group to be carried out. Prominent among these are, the size, the selection criteria of participants, the selection of the research context, recruiting participants, their knowledge or lack thereof, space, and time<sup>117, 118</sup>.

The **fundamental objective** of these discussion groups is to assess and interpret the importance of the intervention.

Regarding the **specific objectives**:

- Obtain the general opinion of the users and professionals of the Social Services as well as other services and territorial levels about the implementation and development of the project.
- Identify the participants' assessment of the ESSR as a tool for improving the quality of the services.
- Encourage the participants in the groups to contribute suggestions for improving the tool.

As planned, **three discussion groups** were held:

- GROUP 1: Users of the social services.
- GROUP 2: Social work professionals.
- GROUP 3: Professionals from other Social Services and different territorial levels.

For the RESISOR project, this qualitative assessment method was used to obtain the results of the ESSR, its development and implementation, and together with the conclusions they were integrated into the corresponding results report<sup>119</sup> with the following discussion points to be highlighted:

- General statements about the unified information management.
- Access to information profile.
- Strengths.
- Agility in the processes.
- Monitoring and control.
- Resource optimisation.
- Weaknesses.
- Stigmatisation.
- Risk of abuse and/or misuse of information.
- Overall assessment of the tool.
- Proposals for improvement.
- A single tool that is quick and easy to use.
- Access to the record.
- Extraction of statistical data.

<sup>114</sup> MERTON RK, FISKE M, KENDALL PL. The Focused Interview: A Manual of Problems and Procedures. Columbia's Bureau of Applied Social Research. 1956.

<sup>115</sup> HUERTAS BARROS E, VIGIER MORENO FJ. El grupo de discusión como técnica de investigación en la formación de traductores: Dos casos de su aplicabilidad. Revista Entreculturas, 2010;2. URL: <http://www.entreculturas.uma.es/n2pdf/articulo11.pdf>

<sup>116</sup> GÓMEZ FERRI J, GRAU MUÑOZ A, GIULIA INGELLIS A, JABBAZ M. Técnicas cualitativas de investigación social. Grado de relaciones laborales y Recursos Humanos. Universidad de Valencia. VALENCIA. 2001. URL: [http://ocw.uv.es/ciencias-sociales-y-juridicas/tecnicas-cualitativas-de-investigacionsocial/tema\\_9\\_grupo\\_discusion.pdf](http://ocw.uv.es/ciencias-sociales-y-juridicas/tecnicas-cualitativas-de-investigacionsocial/tema_9_grupo_discusion.pdf)

<sup>117</sup> KRUEGER R A. El grupo de discusión: guía práctica para la investigación aplicada. Ed. Pirámide. MADRID. 1991.

<sup>118</sup> CALLEJO J. El grupo de discusión: introducción a una práctica de investigación. Ed. Ariel. BARCELONA. 2001.

<sup>119</sup> DE LA FUENTE ROBLES YM, MARTIN CANO MC, PÉREZ VILLAR J. RESISOR: Informe cualitativo, grupos de discusión del proyecto RESISOR. UNIA / Universidad de Jaén. JAÉN. 01/03/2017.

Our team of professionals that participated highlighted the values of the ESSR, although they state their concern for the guaranteed **protection of data**. However, they are familiar with the DIRAYA system, used in the PSSA as a support for the EMR. For this reason, they consider that the tool already has the necessary security measures for access to the information it guards, given that it strictly complies with the data protection regulation and there is a traceability of all access to the Record and its updates.

Another aspect raised by the professionals is that the tool should **help simplify**, really absorb or have a means of linking the different platforms in use, so that it becomes a single, easy to use tool. It should also have good technology, so there are no duplications and it is not an incomplete system, given that according to the professionals, and the platform in use, instead of providing information they have to register it in duplicate.

Also, another very important issue for the two groups of professionals interviewed is that the tool must have **access to the record** which would imply an important boost in the quality of the intervention, and secondly, the possibility of **obtaining statistical data** in a way that quantitative studies, of both the needs and interventions, can be carried out.

For all the participants in the different discussion groups, the tool has important strengths, especially in terms of the **agility** it would allow in the processes; the monitoring and control of the interventions and the significant optimisation of resources that it would entail in the current context of crisis.

Overall, the assessment of the tool is **very positive**. Despite the identification of some weaknesses, such as the **risk of misuse and/or abuse of information**, it has great potential, which generates many expectations both for professionals and users.

### 3.5.3. EXPLORATORY ANALYSIS ABOUT THE FEASIBILITY OF THE IMPLEMENTATION OF THE ESSR. SAMPLING TO MEASURE THE FEASIBILITY OF THE ESSR (WP4).

The analysis of the feasibility of the ESSR implementation in Andalusia seeks to provide information on the factors that favour or hinder its implementation, as well as to detect proposed improvements that contribute to the success of the project. To respond to these objectives, a mixed methodology was developed:

**A. Qualitative: Semi-structured interviews** with 19 professionals from the City Council of Dos Hermanas and the company DomusVI, who would be directly involved in the pilot stage considered in the project, and 23 in-depth interviews with key informants, technical managers, professionals and politicians from the Regional Government of Andalusia and the different technological companies involved in the Work Packages of the project. This qualitative analysis made available a real approximation on the assessment, knowledge, expectations, attitudes, possible resistance and/or the degree of motivation, among other issues, that the professionals institutions involved in the pilot experience had. In this way, it was possible to detect strengths and weaknesses to examine in the development and feasibility of the RESISOR project, in the pilot stage, and for the subsequent implementation of the ESSR in Andalusia in order to be able to design and construct a later survey.

**B. Quantitative:** Design of a questionnaire **survey** in five blocks (sociodemographic data, assessment of the ESSR, advantages and disadvantages of its implementation, means of information received and evaluation of the project's information conferences), its processing to the professional team that participated in the different WP and who attended the promotional conferences of the RESISOR project and the analysis of same. For the design, the quantitative and qualitative approaches were combined in seven aspects treated in relation to ESSR and its feasibility: **advantages, strengths, threats, difficulties, strategies, requirements, suggestions and recommendations**. 84 completed questionnaires were collected and the correlations found in the quantitative analysis were examined. The methodological specifications, development, and implementation of this mixed study is described in the corresponding feasibility report for the RESISOR Project<sup>120</sup>.

The main **conclusions** of the study were that there were positive and proactive attitudes towards the ESSR on the part of the consulted professional teams. There is consensus in estimating the importance of the project and of the ESSR for the improvement of community and specialized social services, both public and private, in the Andalusian community. Likewise, it was considered an innovative project and one that will establish a new social services

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<sup>120</sup> VÁZQUEZ AGUADO O, BORREGO ALÉS Y, FERNÁNDEZ BORRERO M, RELINQUE MEDINA F. RESISOR: Análisis exploratorio sobre la factibilidad de la implementación de la historia social única electrónica. UNIA / Universidad de Huelva. HUELVA. 01/10/2017.



intervention methodology that would improve the management and efficiency of the same. This entails a participation and motivation for professionals which is considered strong point of the project.

The collected data showed the need for **greater knowledge and more training and information** in order to ensure success in implementation and development. In this sense, the structuring of a strategy based on the motivation, training and information of the professional team will guarantee the proper implementation of the ESSR. The coordination that this tool will enable was considered positive and the bureaucratic agility that its implementation and development will, above all, put it in relation with the improvement of the quality of the services and the care given to the users, the ultimate purpose of the development work and start-up of the ESSR.

The aforementioned difficulties and disadvantages make it possible to take into account relevant issues in the pilot stage and its implementation, with a commitment to develop this coordination despite the **high complexity** noted in various areas. One of them has to do with the **professional level of resistance to change** and **adaptations to new ways of working**, and to the tool itself. Another area has to do with the difficulties of a technological nature, which are substantial in a tool of this type. Other issues and elements to keep in mind are the aspects of financing, its guarantee and long-term stability; to guarantee and treat data protection with special care, aspects user privacy and confidentiality, and training and information for professionals.

### 3.5.4 DESIGN OF THE CONTROLLED TEST: DESIGN OF THE INFORMATION COLLECTION TOOL AND DEFINITION OF PROFILES TO MEASURE THE IMPACT OF THE INTERVENTION (WP4).

The **UPO team**, made up of research personnel specializing in social science quasi-experimental research, is included in the evaluation in order to design a strategy to analyse the impact of the project in the pilot stage. This situation requires coordinating efforts with those persons in charge of the pilot study (WP3) to transfer the chronological adjustment of the controlled trial strategy to the piloting methodology (Fig. 15).

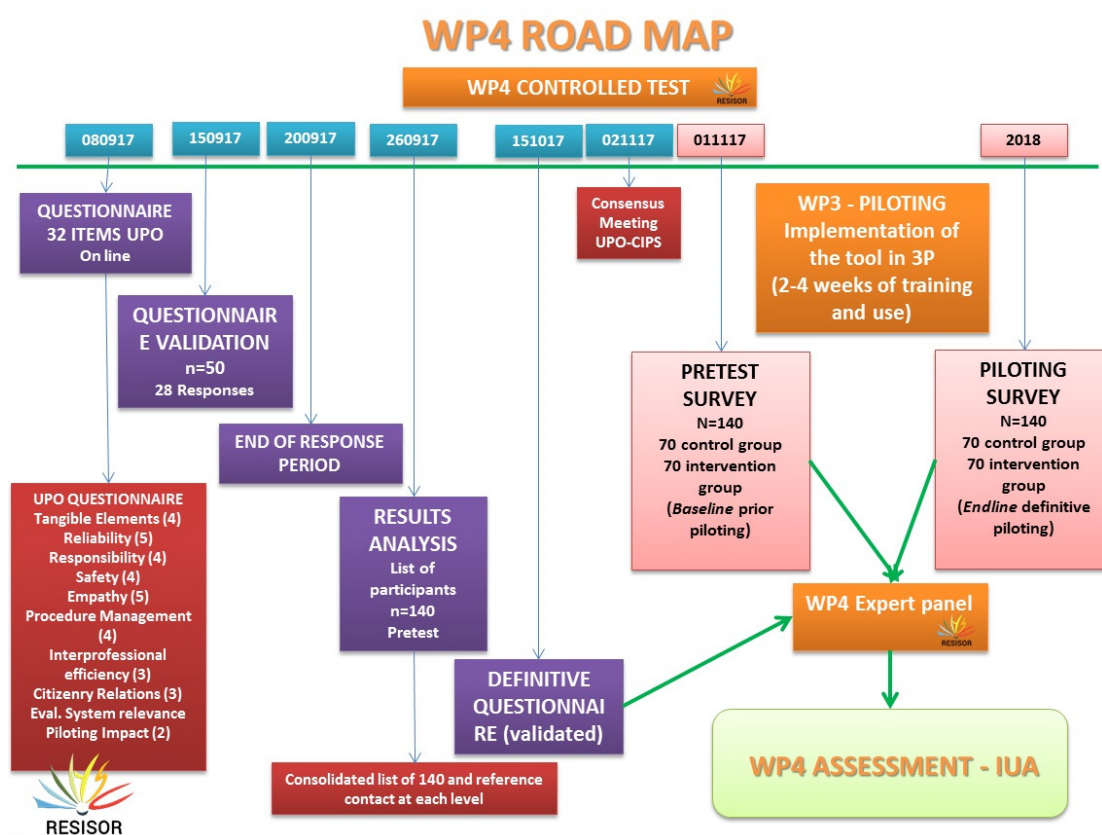


Fig. 15. Roadmap of the WP3 + WP4 working groups, correlation of tasks and expected deliveries Design of the questionnaire and controlled test.

The aims of the controlled test are the following:

- **General:** Measure the impact of the RESISOR Project's implementation (process) in the pilot stage in three procedures within the context of the social services (P1, P2, P3).
- **Specific:**
  - Assess the service quality (ESSR) noted by professionals involved in the management of the procedures during the piloting.
  - Identify actions to improve the ESSR.
  - Assess the method of analysis (controlled test).

First, the **MEASUREMENT OF SERVICE QUALITY QUESTIONNAIRE** was **DESIGNED AND VALIDATED** using the **SERVQUAL method** adapted to the evaluation of social services<sup>121</sup>. It is a model focused on the subjective perception of care quality<sup>122, 123, 124, 125</sup> which will allow, in a systematic way, the attainment of the degree of client satisfaction, the index of service quality and the prioritisation of improvement actions. The basic method consists of evaluating the **expectations and perceptions** of clients with a **questionnaire of 22 items** (which can be modified and adapted to an organisation's needs), which are a part of the **5 dimensions of service quality** (tangible aspects, security, reliability, responsiveness and empathy).

To fulfil all the objectives of the trial, four dimensions were added to the SERVQUAL model: **Management of procedures, professional Efficiency Intervention and citizenry relations** that help us identify actions to improve the ESSR and the **Relevance of the piloting impact evaluation system** dimension, in order to evaluate our work method.

From the adaptation of the SERVQUAL method to the project, a **first on-line questionnaire** was presented that responds to **9 dimensions**: tangible elements, reliability, responsibility, empathy, management of procedures, professional efficiency intervention, citizenry relations, and relevance of the piloting impact evaluation system. Initially, **32 items** were created.

With the resulting tool we proceeded to a **PRE-APPROVAL OF THE QUESTIONNAIRE** (understanding, elimination of redundancies and improvement of the items), which led to the improvement of the wording and the specification of identification indicators. At that time, an **ON-LINE TOOL** (Google-Drive form) was prepared for the data collection and approval of the questionnaire. The information collection for the questionnaire's approval took place from 8-20 September 2017 in a sample of 50 volunteers, of which 28 responded. The results obtained indicate a high internal consistency of the overall scale, and of each subscale.

From the analysis carried out by the panel of experts, it is proposed to use a new **BUNDLED SCALE IN THREE ASPECTS**:

- **Aspect 1: support and backing** That allows for the quality of tools, supports, backing, information systems and (personalised) citizens services to be measured.
- **Aspect 2: procedures.** That allows for the procedural quality, integration of the information and monitoring of the processes to be measured.
- **Aspect 3: resolution.** That allows for the ability to solve problems/demands to be measured.

For the **selection of the test groups**, we proceeded to decide the **agents and professional profiles involved** in the use of the ESSR for the 3 procedures in their different levels of intervention (Local Entities, Companies and Territorial Delegations). Subsequently, the sample is defined (n = 140) and the participants of the **intervention group - IG** (heterogeneous professionals from the SS centre where the pilot will be implemented) and the **control group - CG** (professionals from another CSS centre with similar characteristics to the previous one) are selected for each of the 3 procedures.

<sup>121</sup> **BARRANCO C, CÍVICOS A, CÁCERES C, DÍAZ L, HERNÁNDEZ M, PUYOL MB.** La calidad de servicio percibida en centros ocupacionales de personas con discapacidad: validación de la escala SERVQUAL. Trabajo social y salud. 2004;47: 73-79.

<sup>122</sup> **PARASURAMAN A, ZIETHAML V, BERRY LL.** SERVQUAL: Una escala de artículos múltiples para medir las percepciones del consumidor de la calidad del servicio. Journal of Retailing, 1988; 62(1):12-40.

<sup>123</sup> **MARTÍNEZ MA.** Calidad percibida en los servicios sociales de inclusión. Una aproximación desde el caso de Avilés (Asturias). Cuadernos de trabajo social. 2015;28(1): 115.

<sup>124</sup> **DE LA PEÑA SALAS E.** Análisis de la satisfacción y de la calidad percibida por las personas atendidas en los servicios sociales comunitarios del Centro Municipal de Servicios Sociales Delicias del Ayuntamiento de Zaragoza. Cuadernos de trabajo social, 2014; 27(1): 115.

<sup>125</sup> **BLANCO IB, ARAMBURU VD.** Orientaciones para la implantación progresiva de sistemas de calidad en los servicios sociales locales de la CAPV. Zerbitzuan. 2009;45: 39-47.

On 2 November 2017, the resulting scale, to which the localisation items will be added (intervention level, procedure and profiles), was presented to the project managers (RMESP-ASSDA-IUA).

This model was adapted by substituting the **expectations pre-test** for a **perception of the procedures pre-test** without the ESSR, and applying a **perception of the procedures post-test** after using ESSR tool following the WP3 pilot, with which the formula will be applied:

**Service quality Index = Perception after pilot - Perception before pilot.**

In this way we will have a single, applicable questionnaire for all of the procedures, P1, P2, P3, which include items that allow for the impact of the products, VISOR, SIP and REPOSITORY to be measured.

An initial work report was written to present an advance of objectives, identification of agents (sample/population to analyse), a method to measure the results and design of the information collection tool<sup>126</sup>.

In 2018, in order to proceed with the **training of professionals** who had to adapt to the new system, **validation tests** were carried out on the developed software, and finally the **pilot** began during a six-month period. The pilot was coordinated by RMESP and the tech companies that produced the software.

The **controlled test** was carried out in two steps: before the pilot the IG and CG, a sample of 140 people for the intervention, took the **questionnaire** (pre-test - base line) and after the phase WP3 piloting they took it again (post-test - end line), in order to **measure the impact of the intervention**.

The purpose of the controlled test was to measure the impact of the RESISOR implementation in the pilot stage for procedures regarding dependency, residential, children and at-home assistance. For this, the research team from Pablo de Olavide University used the **Serviqual method**, as a model focused on the subjective perception of quality of care, in order to evaluate the perceived quality of the interventions carried out by Social Work professionals in the Social Services of Andalusia, through the perception before and after the implementation of ESSR. For this purpose, information was collected through a telephone survey of an intentional sample previously identified by RMESP, carried out between November 2017 and February 2018 (**Pre-intervention**) and from July to September 2018 (**Post-intervention**).

Once this phase was completed, the objective of which was to describe and compare the results of the perceptions in order to identify the impact of the intervention and the quality gaps to get proposals, the general conclusion reached was that the intervention (piloting of the tool for ESSR in Andalusia), contributed to improving the perception of quality significantly, where the calculation of double differences showed that the variation is causally attributable to the effect of the intervention.

Furthermore, the quality perceived by the professionals of the intervention sample regarding the ESSR is **excellent**; the perception improves with piloting, and the most visible quality gaps are focused on the personalised care that can be offered to the population and the procedures for resolution of demands, taking into account the piloting delay and the variation in the duration of the same.

### **3.5.5. MONITORING SEMINAR FOR TECHNICAL PERSONNEL INVOLVED IN THE IMPLEMENTATION (TRAINING AND ASSESSMENT OF THE IMPORTANCE AND FEASIBILITY OF THE ESSR) (WP4).**

In June 2018, the IUA organised a reflection seminar, to which specialists in process implementation, social records and technical personnel for the pilot intervention from all participating entities in the project were invited. At the same time, it was about channelling the assessment of these people regarding the importance and feasibility of the experience<sup>127</sup>.

<sup>126</sup> **DÍAZ JIMÉNEZ RM, CORONA AGUILAR A, HERRERA GUTIÉRREZ MR, RODRÍGUEZ GARCÍA MJ, ZATAPA MOYA AR.** Diseño del ensayo controlado: Diseño de la herramienta de recogida de información y definición de perfiles. UNIA / Universidad Pablo Olavide. SEVILLA. 01/10/2017.

<sup>127</sup> RESISOR: Seminario sobre la Historia Social Única del proyecto Europeo RESISOR en la sede de la Universidad Internacional de Andalucía. URL: <http://www.resisor.es/index.php/sala-de-prensa/noticias/76-seminario-sobre-la-historia-social-unica-del-proyecto-europeo-resisor-en-la-sede-del-monasterio-de-la-cartuja-de-la-universidad-internacional-de-andalucia>

## 3.6 RESULTS.

### 3.6.1. PRACTICAL APPLICATIONS DERIVED FROM THE ESSR.

At the primary care level of the PSSS and the CSS, the ESSR has been received with high expectations, due to the large number of information systems their teams of professionals currently use in their daily work: SSUIS, NETGEFYS (Community Social Services Management System), SIRMI (Minimum income user information system), ACIVIT or other management systems... which hinders and reduces effectiveness and efficiency of the organization.

The pilot in the municipality of Dos Hermanas shows how professionals in the social services field see their work optimised by having the user information that generated by Community Social Services and Specialized Social Services, thus enabling an integrated management model. This is very relevant when studying, assessing and designing social intervention projects - that have already incorporated the ESSR - together with persons or family units before the demands of the population.

With the ESSR, professionals will access the different social intervention projects that have been carried out with family units or with any member of the same, guaranteeing continuity of care.

By making the interoperability of systems possible, this technical tool will provide fluidity and immediacy in communications, especially in the coordination with other entities, with other social protection systems such as health, education... The ESSR will enhance the exploitation of statistical data, facilitate the promotion of evidence-based professional practice and supported by knowledge management, research and innovation.

And most importantly, the ESSR will have an impact on the improvement of the services provided to our users, allowing them to access their files and have certain certifications available to them (recognition of the situation of disability, dependence, the large family certificate, etc.).

In the PSSSA, thanks to the ESSR, the organisation, the population and the professionals will all gain competencies and potentialities.

On the other hand, we must emphasise that three telematic training courses have been prepared, designed and implemented in the RMESP platform with multimedia, interactivity and gamification criteria that allow a simple and universal approach to the three main areas of the project (Assessment of the situation of child abandonment, Management of day centres and residential care and Management of Community Social Services in ACIVIT) for the professional who has to work with them. Therefore, they can do the initial training in the operation of the system, or after some time, a retraining.

### 3.6.2. CORPORATE IMAGE OF THE RESISOR PROJECT.

**VISUAL IDENTITY DESIGN** or own corporate image in different formats, through the design and development of the logo and isotype and informative leaflets on the purpose of the project, as well as the functionalities and advantages of the ESSR for the general public, and in particular, teams of social services professionals.

**WEBSITE DESIGN**, with free access, where four aspects have been taken into account: projection, optimisation, content and accessibility. On the website it is possible to consult all relevant information on the progress of the project, the results reports and the dissemination and communication actions<sup>128</sup>.

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<sup>128</sup> WEB del proyecto RESISOR: URL: [www.resisor.es](http://www.resisor.es)

### 3.6.3.- DIGITAL COMMUNICATION PLATFORM.

**PROMOTION OF ACTIVITIES:** primarily, following the guidelines of the project, through different means of communication.

**PARTICIPATION AND ORGANISATION OF EVENTS:** the main objective of this activity is to guarantee the dissemination of the project in specialised national and transnational events related to the subject, contributing to the exchange of experiences and peer learning. For this, the indicators have been established based on the duality of the planned dimensions: participation and exchange.

**DISSEMINATION AND TRANSFER OF RESULTS:** in this activity the aspects taken into account were: amplification of the experience through the organisation and realisation of ESSR Workshops, both at the national level and in the Autonomous Community of Andalusia. Also, the impact and monitoring of the project and the scientific production generated from it.

## 4. FUTURE SCENARIOS OF THE ESSR.

The **digital transformation of the administration** will develop highly professionalised digital spaces and will have a global reach. The use of digital technology in health and social care can improve the quality, efficiency and experience of patients and users, as well as support more integrated care and improve the population's health and quality of life<sup>129</sup>.

The large-scale change involving digital technology with this digital transformation, such as the adoption of electronic clinical and social records, and the possibility of sharing them is complex and requires paying special attention to the particular aspects of change, such as compliance with the European regulations on data protection and ethical aspects.

Key barriers to the success of digital change include: the limitations of specialised personnel that deal with care organisations, tight budgets, organisations' attitudes towards risk generated by fear or resistance to change and relationships that exist between the care providers and the users. Over time, most barriers can be mitigated through effort and treating digital projects as projects for change, not as technological infrastructure innovation projects exclusively. Key factors for the success of these projects are the effective participation and active involvement of their professionals, as well as the allocation of sufficient economic resources<sup>130</sup>.

What happened with DIRAYA in the health services of Andalusia is our implementation model of reference for the ESSR. The universal implementation of DIRAYA in Andalusia began in 2003, replacing the previous computer system (TASS). One of the fundamental changes has been that with TASS each centre had its own medical records database, whereas with DIRAYA there is a single medical record for each person that is accessible in any health centre. The use of telecommunications in the DIRAYA system has been decisive for the implementation model. DIRAYA was first implemented in large centres, located in urban areas, and progressively extended to centres with smaller populations. This progress was made in parallel with the availability of communications, allowing a margin for their expansion to rural areas and, additionally, improving the access to consultations for the urban population, which was seriously compromised by difficulties which DIRAYA responded to by means of the centralised appointment. The large deployment of the system in 2004-2005 stands out, a year in which more than 66% of the population was covered. By 2007, 90% coverage had been achieved, although it took 3 more years to implement the system in 561 small centres that made up the remaining 10%. In 2010, the implementation of DIRAYA in primary care (100% of the population) was completed<sup>131</sup>. At present, some Hospitals in the health network are still pending

<sup>129</sup> MAGUIRE D, EVANS H, HONEYMAN M, OMOJOMOLO D. Digital change in health and social care. The King's Fund. Londres. 2018. URL: [https://www.kingsfund.org.uk/sites/default/files/2018-06/Digital\\_change\\_health\\_care\\_Kings\\_Fund\\_June\\_2018.pdf](https://www.kingsfund.org.uk/sites/default/files/2018-06/Digital_change_health_care_Kings_Fund_June_2018.pdf)

<sup>130</sup> GARCÍA MARCIEL R, LOBATO BELEIRO B. La transformación digital en la integración sociosanitaria. Fundación CASER. Madrid. 2015. URL: [http://www.fundacioncaser.org/sites/default/files/b.lobato\\_y\\_r.marciel\\_latransformaciondigital\\_web.pdf](http://www.fundacioncaser.org/sites/default/files/b.lobato_y_r.marciel_latransformaciondigital_web.pdf)

<sup>131</sup> SAS. DIRAYA. INDICADOR 9.4. Centros de atención primaria y población con Diraya funcionando. Andalucía, 2002-2010. URL: [http://www.calidadsaludandalucia.es/es/innovacion\\_9\\_4.html](http://www.calidadsaludandalucia.es/es/innovacion_9_4.html)

incorporation. This puts us on notice of the complexity of the challenge and the time needed to achieve the objective, with a long-term strategy and in different phases of implementation, in a satisfactory manner for all stakeholders.

The different scenarios that can present themselves in the expansion of the ESSR in Andalusia are shown below, based on the activities carried out within the framework of the RESISOR project.

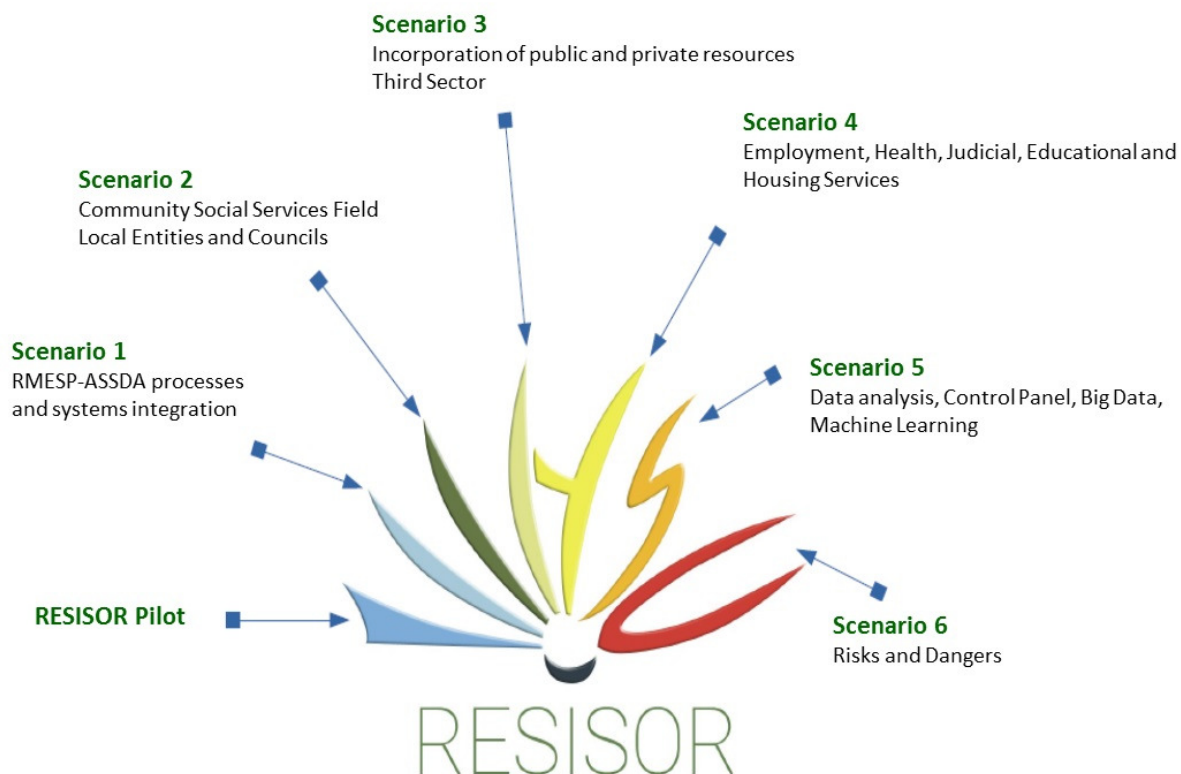


Fig. 16. Future Scenarios of the ESSR.

#### 4.1 SCENARIO 1. RESISOR PHASE 2 - PROCESSES AND COMPUTER SERVICES OF THE REGIONAL MINISTRY OF EQUALITY AND SOCIAL POLICIES.

The next step for a comprehensive implementation of the ESSR system is done through the integration of the processes and Information Systems of the RMESP and the ASSDA (ISSS and ASSDAIS) as well as all those systems that are not fully automated at present.

For the pilot stage, procedures have been implemented to recognize the Situation of Dependency and the Right to Benefits, the management of Day Centres and Residential Care (ASSDA) and the assessment of the Situation of Child Abandonment (RMESP).

After the pilot stage, the rest of the ISSS procedures and services will be integrated (areas of Disability, Childhood and Family, Elderly People, Addictions and Non-contributory Pensions), thus guaranteeing that shared information is available to be consumed by professionals from the CSS and all other areas. This will facilitate the use of the systems, since one of the main premises that guarantees the management of the change and the acceptance of an information system is that the systems provide valuable information to the users so that they make use of them and that not they are mere registers of information in the system, but participants and beneficiaries.

An important element is the governance of the ESSR, so that it may assume, in a structured and sustainable way, the needs derived from the incorporation of more information and its access control.

#### **4.2 SCENARIO 2. RESISOR PHASE 3 - PROVINCIAL COUNCILS AND LOCAL ENTITIES**

This scenario shows progress towards the expansion and implementation of the new ESSR system in the realm of local entities. These entities offer community, general, basic or primary care social services, which have a universal character and are directed to the population as a whole, responding to any person who goes to these services and/or entities. The areas where these services are carried out correspond to the Provincial Councils and local municipal entities.

This phase is fundamental for the comprehensive implementation of the ESSR throughout the territory; leading to RESISOR Phase 3. Once the system has been tested, and having included a greater number of procedures and systems, it spreads to the community level, implementing the new needs and functions in local entities, so that their professionals can carry out the social intervention project defined in the Law 9/2016, of 27 December, of Social Services of Andalusia.

For the field of piloting, the ACIVIT tool has been integrated into the City Council of Dos Hermanas, but it is possible that other municipalities in Andalusia use other management tools that must be improved to allow interoperability with the ESSR of Andalusia.

RESISOR P3 must have all the necessary processes to fully and correctly carry out the social intervention project, as well as all its phases (assessment, planning, intervention and monitoring).

#### **4.3 SCENARIO 3. RESISOR PHASE 4 - SPECIALISED PUBLIC AND PRIVATE RESOURCES**

Moving forward with the implementation of ESSR at all levels, is the integration and incorporation of specialized public and private resources.

It is necessary to implement the mechanisms for cases in which people go directly to the specialised services; although preferably they are referred from community social services.

Specialised care services are in the last link in the Social Services chain, integrating their implementation as the ESSR system operates favourably in primary care services. The services, which are distributed throughout the Andalusian community, require a push to implement the new needs and functions that the specialised services must meet, as well as the facilities for the system use by the professionals.

#### **4.4 SCENARIO 4. RESISOR PHASE 5 - INTEGRATION WITH THE EMPLOYMENT, HEALTH, EDUCATION, JUDICIAL AND HOUSING SERVICES STATED IN THE SOCIAL SERVICES LAW OF ANDALUSIA**

The objective is to incorporate a multidisciplinary intervention that improves the care of people in vulnerable situations and improves their empowerment to get out of said situation.

Comply with the Social Services Law of Andalusia regarding:

- Coordination with the primary and specialised care services, with special attention to the area of mental health, for the design of integrated service packages that respond to the population of reference's social and health care needs.
- Coordination with educational services to facilitate comprehensive care for children, simultaneously and continuously, and support their families.
- Coordination with employment services to achieve the social and labour insertion of those with difficulties in accessing or maintaining a job, contributing to the search for insertion opportunities.
- Coordination with public housing services through the establishment of joint actions for access to housing, the adequacy and maintenance of housing, and especially against the loss of housing.
- Coordination with judicial services, law enforcement authorities and any other linked to the public services of the Regional Administration for the design of packages of integrated services that respond to the social care needs of the population of reference.

#### 4.5 SCENARIO 5. RESISOR PHASE 6 – INTEGRATION OF BIG DATA ANALYSIS AND MACHINE LEARNING.

This scenario considers a project to collect data from all the **integrated systems, Internet and Social Networks**, as well as an ongoing project of **sensing (IoT or Internet of Things)** of residential centres and services provided to the RMESP, to be stored in a database and treated by **specialised massive data processing techniques (Big Data)**. This includes developing specialised algorithms to identify patterns, perform predictive and preventive analyses, evaluate strategic social service plans (through their indicators) and, ultimately, **machine learning**.

In this way, starting from huge, initially disconnected, data sets, we can identify relationships that allow events to be predicted or even improve the expected results by adjusting the necessary parameters. This scenario is being evaluated with funding sources for Research, Development and Innovation (R + D + I) as well as Innovative Public Procurement (IPP).

#### 4.6 RISKS AND DANGERS FOLLOWING THE COMPLETION OF THE EUROPEAN PROJECT

The first pilot stage established from the ESSR system is developed and robust, given that it incorporates the functional processes necessary for the management of the ESSR itself. Therefore, we have a good base to continue growing in future scenarios.

However, there are critical aspects of the ESSR system that must be considered for its future evolution. Some correspond to the organisational scope, which is the one that presents needs of a greater nature, largely due to the environment in which the ESSR solution was generated and built within the RESISOR project framework. Thus, after the pilot, it has to be moving towards its implementation and comprehensive expansion in the PSSSA. This inevitably involves, and is considered a critical point, the need to create a functional area or team to manage the ESSR, as well as the establishment of organisational and operational governance models that facilitate, within the PSSSA organisation, the management of users, professionals, as well as resources.

It is essential to establish a comprehensive ESSR implementation strategy in the PSSSA, which would be key for the continuation of the RESISOR pilot stage, and that will accompany the implementation of the different elements of the new Social Services Law.

Likewise, it is essential to have the necessary budgetary support to be able to continue with the development and implementation of information systems and computer infrastructures. For this, actions financed with ERDF<sup>132</sup> funds, the European Social Fund for the continuation of the ESSR in Andalusia are already under way, as well as progress in the Agreement with the entity Red.es, likewise for the financing of actions in the same line.

Additionally, and to follow the path of the different scenarios or ESSR implementation phases, this must be accompanied by a set of actions aimed at minimising, among other things, the aforementioned risks and dependencies.

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<sup>132</sup> BOJA Número 14 - viernes, 19 de enero de 2018. Resolución de 10 de enero de 2018, de la Secretaría General Técnica, por la que se acuerda publicar la formalización de los contratos que se citan. BOJA 2018: 14(268-270)



## 5. RECOMMENDATIONS.

### 1. INTEGRATION.

The ESSR must opt for an integrated model of management of social services at all proficiency levels, whether they are regional or local administrations and other service providers. This integration of competencies must follow a model focused the person and their closest domestic environment, guarantee the comprehensive vision of the person, their family and the groups of borrowers and, therefore, the continuity required in the care and provision of social services for the entire lifespan. In this way, the intensive use of information systems is essential.

### 2.- ACCELERATION, SIMPLIFICATION, USER-FRIENDLY TOOL FOR PROFESSIONALS AND CITIZENS.

Seeks cooperation and continuity of care for people for the proper use of social resources. Streamlines expenditure, helps simplify administration, reduces errors, optimises procedures or processes and unifies information systems. It should also enhance usability, intuition, simplicity of use and the fight to reduce the digital gap of the elderly.

### 3. COORDINATION.

People are unique and demand **comprehensive care** among the different social services (public and private), as well as with other departments of the administration: health<sup>133</sup>,<sup>134</sup>, education, employment, housing.

### 4. SECURITY.

The social trajectory of the person can be shared with and consulted by both community and specialised teams of social services professionals, accessing all relevant information to carry out their functions, with the necessary ethical guarantees of security, confidentiality, unmistakable professional identification, traceability, storage and protection of personal data. Likewise, the system must be established so that the user can access their information with the corresponding security in compliance with the new Law of Transparency of Andalusia

### 5. SEMANTIC - ONTOLOGICAL - TAXONOMIC AND DATA GOVERNANCE DOMAIN.

It is advisable to seek the implementation of a language that's approved and agreed upon by all parties in order to facilitate the exchange of information or the analysis of variables, among other issues.

### 6.- CREATION OF A GROUP OF EXPERTS FROM THE SOCIAL SERVICES OF ANDALUSIA FOR MONITORING AND AUDITING.

This group should advise the progress, growth and consolidation of the ESSR, as well as the training and re-qualification programmes, paying special attention to combat a possible resistance to change by the people who work in social services.

### 7. ACCOMPANYING REGULATORY DEVELOPMENT.

As the integration of computer systems and procedures in the tool progresses, corresponding regulations should be published.

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<sup>133</sup> PINZÓN-PULIDO S, ALONSO-TRUJILLO F, TORRÓ-GARCÍA-MORATO C, RAPOSO-TRIANO MF, MORILLA-HERRERA JC. Experiencias, modelos y claves para la coordinación e integración de servicios sociales y sanitarios. REVISTA: Enferm Clin. 2016;26(1):3-6 URL: <http://www.elsevier.es/es-revista-enfermeria-clinica-35-articulo-experiencias-modelos-claves-coordinacion-e-90447020>

<sup>134</sup> DAURIO NR, FIELDING M, CHOLLEWKA PA. Implementation of an Enterprise-wide Electronic Health Record: A Nurse-Physician Partnership. Stud Health Technol Inform. 2009; 146: 263-5. URL: <http://www.ncbi.nlm.nih.gov/pubmed/19592846>

#### **8. BUDGET ALLOCATION.**

A commitment is required to periodically supply the necessary budget to achieve its full implementation, and initially, it is guaranteed for the coming years.

#### **9. SUFFICIENT LEADERSHIP AND FUNCTIONAL MANAGEMENT.**

The ESSR must have an organisational structure and leadership that prevents the dispersal of decisions and the order of priorities in its development.

#### **10. SPIRIT OF CONTINUOUS IMPROVEMENT.**

A system of continuous updating must be implemented, being supported by collaborations with University institutions, facilitating the possibility to carry out studies and improvement projects.

## 6. APPENDICES

### 6.1 APPENDIX 1. - GLOSSARY OF TERMS AND ACRONYMS.

<b>AAL</b> - Ambient Assisted Living.	<b>SMRNA</b> - Single Medical Record Number of Andalusia.
<b>SDPA</b> - Spanish Data Protection Agency.	<b>OCED</b> - The Organisation for Cooperation and Economic Development.
<b>ASSDA</b> - Agency for Social Services and Dependency of Andalusia, Integrated Social Services System.	<b>WHO</b> - World Health Organization.
<b>B2b</b> - Business to Business.	<b>OTRR</b> - Office for Transfer of Research Results.
<b>BPMN</b> - Business Process Model and Notation.	<b>ICP</b> - Individual Care Programme.
<b>AC</b> - Autonomous Community.	<b>IPSHCI</b> - Interdepartmental Plan of Social and Health Care and Interaction.
<b>EC</b> - European Community.	<b>SIP</b> - Social Intervention Project.
<b>CIC</b> - Corporate Identification Code.	<b>WPO</b> - Work Package - Direction and coordination.
<b>RMESP</b> - Regional Ministry of Equality and Social Policies.	<b>WP1</b> - Work Package - Definition and state of the art.
<b>MBDS</b> - Minimum Basic Data Set.	<b>WP2</b> - Work Package - IT development.
<b>MBSDS</b> - Minimum Basic Social Data Set.	<b>WP3</b> - Work Package - Piloting.
<b>MDS</b> - Minimum Data Set.	<b>WP4</b> - Work Package - Evaluation.
<b>CAI</b> - Centres of Active Involvement.	<b>WP5</b> - Work Package - Communication and dissemination.
<b>IPP</b> - Innovative Public Procurement.	<b>RESISOR</b> - Regional Single Social Record.
<b>RCEP</b> - Residential Centres for Elderly People (own).	<b>GDPR</b> - General Data Protection Regulation.
<b>TD</b> - Territorial delegations.	<b>RPSP</b> - Register of Public Social Services.
<b>EASI</b> - Employment and Social Innovation Programme.	<b>SAAD</b> - System for the Autonomy and Care for Dependence.
<b>SDCD</b> - Stays in Day Centres for People with Disabilities.	<b>AHAS</b> - At-home Assistance Service.
<b>SDCE</b> - Stays in Day Centres for Elderly People.	<b>RCS</b> - Residential Care Service.
<b>SDCOT</b> - Stays in Day Centres of Occupational Therapy.	<b>AHS</b> - Andalusian Health System.
<b>EHR</b> - Electronic Health Record.	<b>UASS</b> - Unified Access System of the Social Services of Castile and Leon.
<b>eID</b> - National Electronic Identities.	<b>IS</b> - Information system.
<b>EIPonAHA</b> - European Innovation Partnership for Active and Healthy Ageing.	<b>SIP</b> - Social Investment Package.
<b>LFA</b> - Logical Framework Approach.	<b>PASDA</b> - Information System of the Andalusian Plan on Drugs and Addictions.
<b>EPR</b> - Electronic Patient Record.	<b>SISAAD</b> - System for Autonomy and Care for Dependence.
<b>ESB</b> - Enterprise Service Bus.	<b>ISSS</b> - Integrated System of Social Services.
<b>ESF</b> - European Social Fund.	<b>SSUIS</b> - Social Services User Information System.
<b>ESN</b> - European Social Network.	<b>SOA</b> - Service Oriented Architecture.
<b>DG</b> - Discussion groups.	<b>PSSS</b> - Public System of Social Services.
<b>GDPR</b> - General Data Protection Regulation.	<b>PSSSA</b> - Public System of Social Services of Andalusia.
<b>SSHRC</b> - Shared Socio-Health Record of Catalonia.	<b>IS</b> - Information systems.
<b>EMR</b> - Electronic Medical Records.	<b>PHSA</b> - Public Health System in Andalusia.
<b>SR</b> - Social Record.	<b>SSR</b> - Single Social Record.
<b>SSR</b> - Single Social Record.	<b>CSS</b> - Community Social Services.
<b>ESSR</b> - Electronic Single Social Record.	<b>TES</b> - Electronic Health Card.
<b>IDIH</b> - Institute for Development and Integration of Health.	<b>TIC</b> - Information and Communications Technology.
<b>IFIC</b> - International Foundation of Integrated Care.	<b>UE</b> - European Union.
<b>LAPAD</b> - Law on the Promotion of Personal Autonomy and Care for Persons in Situation of Dependency.	<b>UML</b> - Unified Modelling Language.
<b>LOPD</b> - Organic Law on Personal Data Protection.	<b>UNEM</b> - Women's Employment Units.
<b>LTC</b> - Long Term Care.	<b>URL</b> - Uniform Resource Locator.
<b>LFI</b> - Logical Framework of Indicators.	

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