

# TEMPLATES STEP 4. THE STH CUSTOMER JOURNEY FOR VALENCIA CITY PROJECT

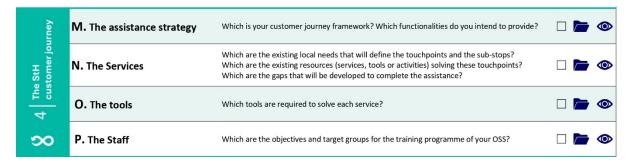


Table 1. Test materials for step 4

This step (and its sub-steps) aims to define **Valencian local context implementation strategy in order to design a proper long-term smooth experience customer journey** harmonized with the StH validated framework. The document is an example of the application of the templates to Valencia (Spain) and serves as model for the transferability of the Citizen Hub concept. More information is available in <u>D3.2 Strategy & structure to implement the Citizen Hub concept for the two pilots, D2.4.-Mapped suitable protocols and methods for quality control of the renovation works (including skills definition) and for buildings performance monitoring., and in <u>D3.6. Training program for the Citizen hub staff in the two pilots.</u></u>

The list of documents submitted for **Step 4 in Valencia** is described below:

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В.	The Citizen Hub supporting services proposal  B.1. Services Model  B.2. Services Menu	- 7 -
C.	The Citizen Hub roll-out proposal	
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### **STEP 4.1. – IMPLEMENTATION STRATEGY**

# A. The customer journey framework

	Stop 0 - ON-BOARDING			
	AWARENESS	INTERACTION		
demand	friendly best practices, solutions & regulations,	citizen school		
supply	checklist grants, FIs	workshops		
	Stop 1 - EVALUATION			
	SELF EVALUATION	ASSISTED EVALUATION		
demand		personal appointment		
supply	friendly tool	EPC, design tools,		
suppry		solution templates		
	Stop 2 - DESIGN & FORMALI	ZATION		
	DESIGN	SELECTION	FORMALIZATION	
demand		registries & lists	contract templates	
supply	technical solutions & checklist	registries & lists	contract templates	
	Stop 3 - REALIZATION			
	TRAINING	ASSESSMENT	MEDIATION	QUALITY ASSURANCE
demand	micro-training workshops	workplan checklist	citizen school	follow-up report &
supply	evaluation for registries & lists	workplan template	personal appointment	questionnaire
	Stop 4 - VALIDATION			
	FEEDBACK	COMPARISON	MONITORING	CERTIFICATION
demand	satisfaction/ complaints/	friendly tool, EPC	before-after	best practices
supply	sharing questionnaires	2 best practices	2 best practices	best practices

Figure 1.- customer journey & functionalities (Valencia city pilot)





# B. Your customer Journey

		Stop 0 - ON	I-BOARDING		
	RAISING A	WARENESS	INTERACTION		
	Functionalities	Tools	Functionalities	Tools	
	Repository of user-friendly material (guides, videos, etc.) to raise awareness about the benefits of retrofitting, sustainability and circularity concepts, etc.	Some of the videos in: https://www.turnkey-retrofit.eu/photos-and- videos/album-1/	Contact with technicians / other demand-side actors to solve technical doubts / ask about their experiences	LISTS OF PROFESSIONALS. Chartered architects: https://www.coacv.org/es/arquitectos/arquitectos-coacv/ Trained in retrofitting/specific areas: https://www.five.es/formacion/listados-de-profesionales/	
Demand side	Single portal centralizing the regulations in force to know the legal framework	To be incorporated in a user-friendly way;  REGULATIONS AT NATIONAL LEVEL: https://www.mitma.gob.es/arquitectura-vivienda-y-suelo/normativa  REGULATIONS AT REGIONAL LEVEL: https://habitatge.gva.es/es/web/vivienda-y-	Direct contact with corresponding authorities to solve doubts about the legal framework	Tool for communication between demand side and OSS staff on demand	
	Single portal centralizing the available subsidies for standard actions (simulator?)	SUBSIDIES AT REGIONAL LEVEL (possibility of include them in form of pre-test/simulator?):	Direct contact with corresponding authorites to solve doubts about available incentives	<b>Tool for communication</b> between demand side and OSS staff <b>on demand</b>	
RS	Single portal centralizing financial institutions with specific products for retrofitting, also aimed at homeowners' associations (pre-test on financing options?)	LIST OF FIS AT NATIONAL LEVEL (possibility of include this in form of a pre-test/simulator?): https://www.idae.es/ayudas-y- financiacion/para-la-rehabilitacion-de- edificios/programa-pree-rehabilitacion- energetica-de/prestamos-para-complementar	Direct contact financial entities to solve doubts about financing	<b>Tool for communication</b> between demand side and OSS staff <b>on demand</b>	
ACTORS	Repository of user-friendly material (guides, videos, etc.) to know demand side needs	CIRCULARITY EVALUATION.  Dwelling scale: https://www.circularhomes.eu/circularity- tool-homes/ Building scale: https://www.circularhomes.eu/circularity-	Direct contact with interested demand-side actors to know their profiles, needs & preferences	Forum/tool for communication between demand and supply sides organised by themes (energy consumption, dwelling/building needs, financing)	
Supply	Single portal centralizing the regulations in force to know the legal framework Single portal centralizing the available	tool-buildings/ Same as for the demand side Same as for the demand side		side and OSS staff on demand  Tool for communication between supply	
	subsidies for standard actions Single portal centralizing financial institutions with specific products for retrofitting, also aimed at homeowners' associations	Same as for the demand side	to solve doubts on available subsidies Direct contact with corresponding financial entities to solve doubts about financing products	side and OSS staff on demand  Tool for communication between supply side and OSS staff on demand	
			Direct contact with interested demand-side actors to know their technical needs and the feasibility of interventions	<b>Tool for communication</b> between demand side and OSS staff <b>on demand</b>	
Staff			Direct contact with supply-side actors to know technical solutions available, innovation, feasibility, ranges of prices, etc.	<b>Tool for communication</b> between supply side and OSS staff <b>on demand</b>	
				Tool for priority communication between OSS staff and Public Administration Tool for priority communication between	
			doubts about financing products	OSS staff and Financial Institutions	

Table 2.- ES pilot functionalities, services and tools for stop 0 (Valencia city pilot)





		Stop 1 - E	VALUATION	
	AUTOEV	ALUATION	ASSISTED E	VALUATION
	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs
ı	On-line survey to know self-consumption	DWELLING SCALE: https://www.five.es/productos/herramientas- on-line/test-de-consumo-energetico/ BUILDING SCALE: https://app.enerfund.eu/	offices to demand side; between actors on	Forum/tool for communication between demand and supply sides organised by themes (energy consumption, dwelling/building needs, financing)
S Demand side	On-line user-friendly information to know dwelling basic characteristics/needs On-line survey to know both self- consumption and dwelling basic  characteristics/needs, with additional  information on comfort, etc. On-line user friendly information to know  energy efficiency potential measures & costs	BUILDING SCALE: http://webtool.building-typology.eu/#bm DWELLING & BUILDING SCALE: Labelling wizard: https://tar- labeling.web.app/#J. Morphological design wizard: https://tar- DWELLING SCALE: http://www.five.es/espacio- ciudadano/vivienda-turistica/autoevaluacion- vt/ DWELLING & BUILDING SCALE: https://www.solutions4renovation.eu/es/ BUILDING SCALE: https://4rineu.eu/wp-		Forum/tool for communication between demand and supply sides organised by themes (energy consumption, dwelling/building needs, subsidies & financing, legal framework)?  Examples:  https://preguntas.habitissimo.es/rehabilitacion-edificios  https://www.soloarquitectura.com/foros/#promotores-y-propietarios.44
ACTORS Supply side			On-line survey to perform an energy calculation and a financial calculation  On-line survey / presential interview to know users consumption & behaviour	BUILDING SCALE (accessibility): https://www.five.es/productos/herramientas- on-line/ascensores/ DWELLING SCALE (bathrooms &  kitchens): https://www.five.es/productos/herramientas- BUILDING SCALE: Pro-design wizard: https://bramo.eu/tar- Irv-8/public/wizard-pro Public wizard: https://www.triple-a- reno.eu/1.1.0/public/wizard
Staff			On-line survey / on-site evaluation to know dwelling basic characteristics/needs	

Table 3.-ES pilot functionalities, services and tools for stop 1 (Valencia city pilot)

				Stop 2 - DESIGN 8	& FORMALIZATION		
		DES	IGN	SELEC	CTION	FORMAL	IZATION
		Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs
				User-friendly comparator to ask for/compare offers/quotations	https://reformanerr.com/pres upuesto/ https://www.habitissimo.es/p resupuestos/reformas	of a user-friendly contract	Beyond providing a <b>standard contract template</b> (different for each type of intervention) <b>and/or advice</b> , makes it
	Demand side			Directory of "neutral" technicians (just involved in assessment and certification) for external technical advice, facilitating decision-making	As in Stop 0 - Interaction . LISTS OF PROFESSIONALS. Chartered architects: https://www.coacv.org/es/arq uitectos/arquitectos-coacv/ Trained in retrofitting/specific areas: https://www.five.es/formacio		
				Single portal centralizing the available subsidies and the corresponding requirements  Simulator unifying available/combinable grants and financing options to know	As in Stop 0 - Raising awareness. SUBSIDIES AT REGIONAL LEVEL (possibility of include them		
ACTORS		As a basis: platform with evaluation results (from autoevaluation / assisted evaluation)	Associated with the previous evaluation phase, since it is based on it	and financing options to know		Tool allowing the generation of a user-friendly contract based on the previous design proposal, with a clear definition of the provided services	Same as for the demand side
AC		regulations in force to know the legal framework	REGULATIONS AT NATIONAL LEVEL: https://www.mitma.gob.es/ar quitectura-vivienda-y- suelo/normativa REGULATIONS AT			Strices	
	S	Evaluation form/check-list to check compliance with regulations	Summary of current regulations in the form of a checklist / Platform to allow				
		Information on standard solutions adapted to the local context	Sheets under development by IVE  Renovation package  sheets: https://4rineu.eu/wp-content/uploads/2021/02/4Ri				
	aff		Platform to allow verification of documentation uploaded by Platform to allow verification of documentation uploaded by			Tool allowing the generation of a document ensuring the legal compliance of the project	Same as for the demand side

Table 4.- ES pilot functionalities, services and tools for stop 2 (Valencia city pilot)





				Stop 3 - R	EALIZATION			
TRAINING		NING	ASSESSMENT		MEDIATIO	N	QUALITY A	SSURANCE
	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs
d side	Workshops / Guidelines/tips to reduce/optimize energy consumption based on the habits of the users	Oficina de la energia workshops and training days	Software allowing the generation of a maintenance programme for existing residential buildings.	https://www.five.es/productos/herra mientas-on-line/pomees/	Directory of "neutral" technicians (just involved in assessment and certification) for extra technical support, in case of problems with contracted professionals Directory of legal advisors for legal			
Demand side					support, in case of problems (works/building permits/bureaucracy, etc.) User-friendly information about the legal procedures; forms allowing direct submission of documentation			
	To know the operation and installation of the demanded solutions: virtual classroom with video-tutorials; possibility to request face-to-face tutoring	White-collar workers: https://www.five.es/formacion/ Blue-collar workers (official training/free courses): https://www.fundacionlaboral.org/	Evaluation procedures to check progress in terms of time and quality, to quickly and effectively follow up on works	Roadmap & Logbook for energy	Calendar for requesting appointments (by the demand side); control of the time dedicated to mediation, to optimize the time spent on mediation with demand-side		Evaluation procedures, including steps to be followed and main elements to be checked, for external assessment to ensure the quality of works	
Ë	solutions available	(produced by OSSs staff) included in the lists?	Form to include information during evaluation visits and results (for authorizing payments)	http://italiainclassea.enea.it/condomini4-0/	corresponding bodies, allowing information upload, view of the status of procedures, etc., to optimize the time spent on legal procedures		Form to include information during evaluation visits and results (quality of works) to centralize supporting documents of the work status at each stage (photos, etc.)	https://built2spec-
S	To stay up to date on changes in the legislative framework/procedures: notification board including updates	<b>Newsletter</b> for those professionals (produced by OSSs staff) included in the lists?	Platform to centralize supporting documents of the work status at each stage (photos, etc.)		Tool showing in real time information on payments (status of payments, authorisations, dates of receipts, etc.)		Real-time updating of the assessment results, to offer demand side real-time information on the status of works	
			Real-time updating of the assessment results, to offer demand side real-time information on the status of works					
	To stay up to date on the latest energy renovation solutions: periodic newsletter summarizing the latest solutions available	Newsletter for professionals included in the lists of professionals? / On-line training?	Platform summarizing all the previous information provided by the supply side	OSSs staff work as external 'auditors' of the professionals performing the works	User-friendly forms, allowing direct submission of documentation, making procedures more accessible to minimise the time spent on resolving queries			
Staff	To stay up to date on changes in the legislative framework/procedures: notification board including updates	Newsletter for OSSs staff directly from the public administration / Specific training days			Instant alerts tool for accelerating communication procedures and timeframes  Access to a platform centralizing all project related documentation to avoid intermediate steps and speed			
					up error correction / documentatin submission processes			

Table 5.- ES pilot functionalities, services and tools for stop 3 (Valencia city pilot)





		Stop 4 - VALIDATION							
		FEEI	DBACK	COMPARISON		MONITORING		CERTIFICATION	
		Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs	Functionalities	TT/SS/AAs
	Demand side	Platform for complaints/notifying faults in works, with response time margins depending on the type of feedback (post-installation issues, works fixing, etc.)	Tool for communication between demand and supply sides organised by themes (energy consumption, dwelling/building needs, financing)	Tool allowing the graphical comparison of the consumption before/after the works	Based on <b>evaluation &amp; assisted evaluation</b> tools form stage 1	Platform displaying real-time monitoring data in a user-friendly way allowing objective data comparison (previous step)	Dashboard (different kind of users): https://www.mobistyle-	Information on quality certification system awarded to residential buildings with significant improvements over the mandatory minimums	Information on the system employed by the supply side BUILDING SCALE: https://www.five.es/certificacion-edificios/viviendas/.
ACTORS	Supply side			Tool allowing the comparison of the building elements behaviour before/after the works	Based on evaluation & assisted evaluation tools form stage 1	Platform displaying real-time monitoring data allowing objective data comparison (previous step)	Expert tool: https://www.mobistyle- project.eu/en/mobistyle/results/mobi style-expert-tool	to residential buildings with significant	BUILDING SCALE: https://www.five.es/certificacion- edificios/viviendas/
	Staff			Tool allowing the comparison of the building elements behaviour before/after the works	Based on <b>evaluation &amp; assisted evaluation tools</b> form stage 1	Platform displaying real-time monitoring data allowing objective data comparison (previous step)		Quality certification system awarded to residential buildings with significant improvements over the mandatory minimums	Same as for the supply side

Table 6.- ES pilot functionalities, services and tools for stop 4 (Valencia city pilot)





### **STEP 4.2 - SUPPORTING SERVICES MAP**

### A. The existing resources in place

### A. 1. Training

EU (applicable results)	In-house (partners resources)	local (initiatives)
PROF-TRAC	IVE's training offer	Construction Labour Foundation (FLC)
BIMplement	VCE's training workshops	
TripleA-reno		
BUSLeague		
BUS-GoCircular		

Table 7.- Existing and applicable training resources in place (Valencia city pilot)

#### A.2. Certification

EU (applicable results)	In-house (partners resources)	local (initiatives)
HAPPEN	IVE Certification Body	Residential Building Evaluation Report (IEE.CV)
		Quality Register in the Built Environment

Table 8.- Existing and applicable certification schemes in place (Valencia city pilot)

### A.3. Monitoring

EU (applicable results)	In-house (partners resources)	local (initiatives)
SSO	Energy consumption test	Through VCE's users advisory services
TripleA-reno	Self-assessment tool for tourist homes	
DRIVE 0		

Table 9.- Existing and applicable monitoring protocols and services in place (Valencia city pilot)

### B. The Citizen Hub supporting services proposal

#### **B.1. Services Model**

#### **B.2. Services Menu**

stage	Training	Certification	Monitoring
0 - onboarding	Mentioned EU projects	EPC improvements	IVE tools for self-assessment
1 - evaluation	IVE training offer	suggestions	SSO / TripleA-reno / DRIVE 0
2 - elaboration	VCE training offer	Quality Register	
3 - construction	FLC training offer/ BUS suite	HAPPEN Vol. Certif. Scheme	
4 - validation	IVE training offer	IVE Certification Body	idem stage 0

Table 10.- Spanish OSS supporting services proposal (Valencia city pilot)





# C. The Citizen Hub roll-out proposal

### C.1. Decentralization strategy (pop-up)

initiative	Stage/ What (Services to be provided)	Territory/ Where (Geographical scope)	Periodicity/ When (Temporal scope)
XALOC	Integral service for building retrofitting	Valencia region	First offices created in 2020 Decree 199/2021 signed in Dec.21
OTEA	Assistance on energy saving, energy efficiency, and renewable self-consumption	Valencia region	Launch in Dec.21 Operation planned until 2023
Other physical offices	Integral services	Other ES regions	See D.2.1 (The previous experiences, p.7-8)
Web tools/platforms	Search of professionals Requesting quotes	ES national context	See D.2.1 ( <i>The previous</i> experiences, p.8-9)
Professionals' directories or associations	Misc.: provision of services, promotion of retrofitting, search of professionals, etc.	ES national context	See D.2.1 (The previous experiences, p.9)
In-store assistance	Intermediaries between users and professionals	Some ES regions	See D.2.1 ( <i>The previous experiences,</i> p.9)

Table 11.- Spanish OSS roll-out proposal (Valencia city pilot)





### STEP 4.3. - STH DOCUMENT 7. STAFF TRAINING **DESIGN METHODOLOGY**

#### A. Skills

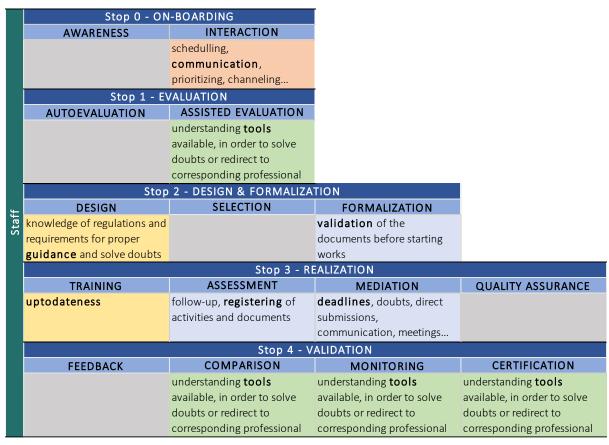
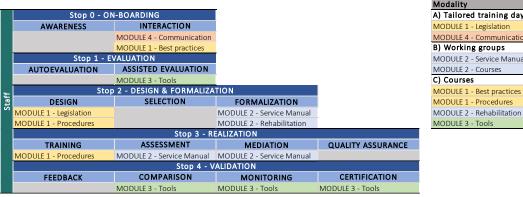


Figure 2.- staff customer journey, services and training needs (Valencia city pilot)

#### **B.** Contents



MODULE 4 - Communic B) Working groups MODULE 2 - Service Manual all all MODULE 1 - Best practices all tbd MODULE 1 - Procedures tbd all MODULE 2 - Rehabilitation tbd

Figure 3.- Modalities and planning (Valencia city pilot)





### C. Resources<sup>1</sup>

Content (From section B)	Training resource (Name )	Provider (Entity name)	Format (Present/ online)	Duration (hours)	Cost (€)
	Gap!				

 $<sup>^{\</sup>rm 1}\,\mbox{This}$  activity has not been included the pilot project in Valencia.



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### D. Program

Modality  A) Tailored training half day	Main Stages	Profiles	Requirements	Evaluation	Certificate
			>=1 legal background related to housing and	01	-
MODULE 1 - Legislation	Design	all	administrative procedures	Observation	Team
gislation and local level. Customized Il the aid available from the different a	an regeneration and the plannin training day for municipal techr administrations so that they can	g of actions in the o nicians on Royal De	: different management areas at three scales is provide cree 853/2021, Direct economic aid for citizens: the tly; and Economic aid for municipalities: so that they	purpose is to mal	ke them aware
ne municipality and how to request the MODULE 4 - Communication		all		Observation	Toom
oft skills	Interaction	all	•	Observation	Team
B) Working groups - half day					
MODULE 2 - Service Manual	Formalization; Mediation; Assessment	all	>=1 technical backgroung related to building renovation	Observation	Team
ollaboration agreement established be erived from the Manual: Operational nunicipal technicians; Data collection hese are meetings to share informatio	ties to be carried out by the loca etween these administrations ar sheets of the actions; digital ma sheets on of interest to municipal techn	nd the Second Vice terial; Graphic and icians on initiatives	inistrations adhered to the RED XALOC initiative, whi Presidency and Ministry of Housing and Bioclimatic dissemination material; Planning of dissemination ca s and experiences carried out in some municipalities procedures; Reduction of municipal taxes and fees; I	architecture. Com impaigns; Training related to housing	plementary too plan for , which serve a
ODULE 2 - Courses	Evaluation; Validation	all		-	-
oxation; Retrofitting manager, function /orktable will follow to design the besity deductions, IBI and ICIO deduction ) Courses  IODULE 1 - Best practices  EAL CASES OF ENERGY REHABILI	st fitting courses for the specific is), Ad-hoc training course on t	the tools and proto	ng: Aids for the rehabilitation of buildings and home cols of the service offered -	s (Next Generation	, personal inco
0 hours online	esses in different areas are expo		posure of the professionals involved. The ultimate go	al is for students t	o acquire a glo
MODULE 1 - Procedures	Training	all	>=1 legal background related to housing and administrative procedures	Test	Individual
odditionally, an approach is made to the MODULE 2 - Rehabilitation Manager	he international scale in urban re Formalization		ent of the project, emphasizing its practical dimension >=1 technical backgroung related to building renovation	Test	Individual
overs the entire rehabilitation process	echniques to carry out the mana s, from the duty of property con	servation, the econ	ol of the different stages of a building rehabilitation a nomic estimation of this type of project, the search fo the completion and maintenance of the works.		
MODULE 3 - Tools	Evaluation	customer service	-	Test	Individual
Aicro-trainings  short videos (10 -15 minutes) in friend ervice: Introduction to EE-buildings; H ppliances; Renewable energies Energy rehabilitation & Connect	dly language about energy Efficie How to improve the EE; User beh to the sun	ency on residential aviour; Insulation; \	buildings and renovation strategies, addressed to cit Windows; Thermal installations; Existing thermal insta enovation in these 3-4 hours workshops.	izens or non-techn	
MODULE 3 - Tools	Design	technician	technical backgroung related to building renovation	Test	Individual
n Spain. This course presents the CERN lossibilities offered by the program, er program are also offered. IECHNICAL BUILDING CODE 1.5 hours	MA program in its latest version in the mphasizing the additional functi	(5). The operation ( onalities with respe	cument, for the Certification of Energy Efficiency of It of each of the tabs is exposed in a theoretical way, go ect to the previous version (4.2.5). A series of practical diffication through Royal Decree 732/2019, incorpora	oing into the detail al examples of the	of the definition
MODULE 3 - Tools	Evaluation; Validation	technician	technical backgroung related to building	Test	Individual
The Evaluation Report of the bui Characterization of injuries in buildings	ilding (IEEV.CV) s and writing of the IEEV.CV repo	ort	renovation  Opposedure, specially designed for residential const		

aspects in inspection of residential buildings for the drafting of the IEE. This training has been designed under the framework of Component 2 – Housing Rehabilitation and Urban Table 12.- Valencia Region basic training program (Valencia city pilot)

which the IEE is mostly requested. Likewise, basic knowledge is offered in the field of pathology in construction and accessibility evaluation, addressing the most common

Regeneration Plan of the Recovery, Transformation and Resilience Plan, to facilitate the proper management of European Next Generation funds.





# E. Budget

year 1													
Modality	h/M	Staff	h	€/h	Cost	W1	W2	W3	W4	W5	W6	W7	W8
A) Tailored training day													
MODULE 1 - Legislation	4	3	12	10	120								
MODULE 4 - Communication	4	3	12	10	120								
B) Working groups													
MODULE 2 - Service Manual	4	3	12	10	120								
MODULE 2 - Courses	4	3	12	10	120								
C) Courses (on-line)													
MODULE 1 - Best practices	10	3	30	8	240								
MODULE 1 - Procedures	50	3	150	8	1200								
MODULE 2 - Rehabilitation	30	3	90	8	720								
MODULE 3 - Tools	10	1	10	8	80								
MODULE 3 - Tools	10	1	10	8	80								
MODULE 3 - Tools	10	1	10	8	80								
Total			348		2880								

Table 13.- Cost & timeline for set up (Valencia city pilot)

each year									
Modality	h/M	Staff	h	€/h	Cost				
A) Tailored training day									
MODULE 1 - Legislation	4	3	12	10	120				
B) Working groups									
MODULE 2 - Service Manual	4	3	12	10	120				
C) Courses (on-line)									
MODULE 3 - Tools	10	1	10	10	100				
MODULE 3 - Tools	10	1	10	10	100				
MODULE 3 - Tools	10	1	10	10	100				
Total			54		540				

Table 14.- Regular training yearly cost (Valencia city pilot)

