

TOWARDS THE UTOPIA: THE SOCIAL SMART HOME

X CONGRESO INTERNACIONAL

ESTATUTO JURÍDICO DE LAS CIUDADES INTELIGENTES

CLIMATE CHANGE AND HOUSING POLICY

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THE UTOPIA

Seventh Framework Programme of European Union in the period from 2007 to 2013

CHALLENGE 3.7: ICT for independent living and inclusion.

OBJECTIVE: Accessible and inclusive ICT

Impact 1. *Strategy of integrating people at risk of exclusion into knowledge society;*

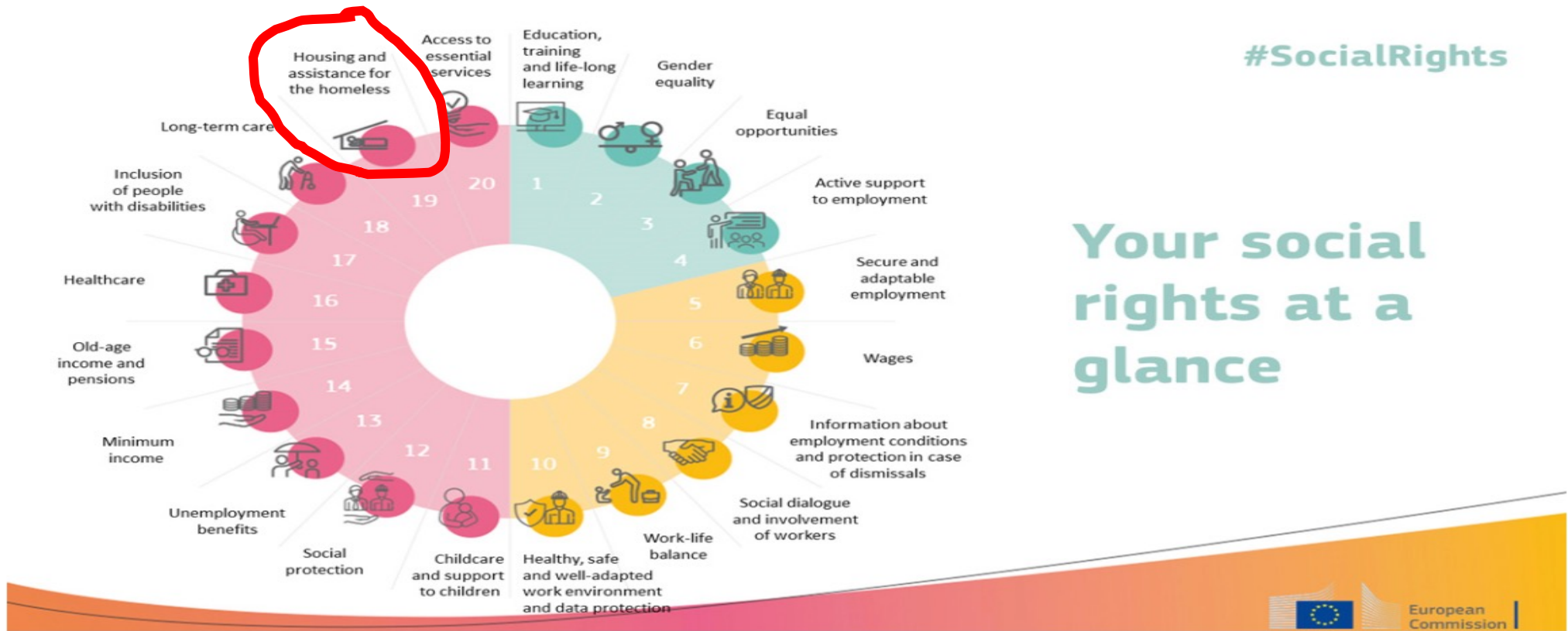
Impact 2. *Strategy of addressing ICT for independent living and inclusion to the ageing population and people with high disability rates;*

Impact 3. *Strategy of breaking the major barrier of complexity, lack of utility, accessibility and usability of ICT for groups at risk of exclusion*

Impact 4. *Strategy of using ICTs by the ageing population to significantly prolonging independent living and increasing active participation in the economy and in society.*

THE UTOPIA

The European Pillar of Social Rights in 20 principles



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20 principles of the European Pillar of Social Rights

HOUSING

Everyone has the right to a good-quality, affordable place to live

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WHAT DOES IT MEAN "GOOD-QUALITY PLACE
TO LIVE"?

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Cuadro I. Dimensiones y factores de las Vivienda Inclusiva y en Exclusión Residencial.

Dimensiones	Vivienda Inclusiva	Exclusión Residencial
Tecnológica	Domótica, IoT Acceso a la red (internet) Banda ancha 4 G 5 G 6G? Viviendas adaptadas al cambio climático a través de tecnologías de vanguardia	Carencia de innovaciones tecnológicas Falta de acceso a internet Pobreza informativa
Tiempo (uso del tiempo)	Reparto del uso del tiempo en actividades del hogar e hijos (cocina, limpieza, hijos...) en función del género Conciliación Reparto del uso del tiempo en el uso de aparatos electrónicos conectados a la red (tablets, ordenadores, móviles) en función de la edad Reparto del uso del tiempo en función de la etnia, cultura, religión.	Inequidades en el uso del tiempo y brecha de género Brecha digital en función del tiempo y variables como el género, la edad, la etnia Brecha temporal de acceso a bienes y servicios públicos y privados
Jurídica	Derecho pleno a la vivienda digna (artículo 47 CE). Derechos de ciudadanía. Viviendas sociales Ley por el Derecho a la Vivienda	Desahucio Okupación Sinhogarismo Chabolismo vertical y horizontal

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Económica	Capacidad económica para hacer frente a la compra o alquiler de vivienda y a los gastos derivados de la vivienda	Sobreesfuerzo económico Sobreendeudamiento Pobreza energética
Psico-social (salud física, mental, emocional, social, redes sociales)	Viviendas y barrios seguros Integración residencial	Inseguridad residencial Acoso residencial Violencia de género Discriminación residencial
Arquitectónica	Calidad de las viviendas para satisfacer las necesidades de los hogares en las distintas etapas vitales, capacidades funcionales, etc.	Infravivienda Vivienda inadecuada
Espacial y urbanística	Acceso igualitario a los servicios públicos y privados (transporte, saneamiento, agua potable, electricidad, gas, etc.)	Segregación espacial Degradación urbana Accesibilidad precaria o nula a servicios públicos y privados
Medioambiental (interior y exterior)	Calidad medioambiental exterior (viviendas con reducida emisión de gases de efecto invernadero, calidad del aire, parques públicos) e interior (calidad de los materiales utilizados y de la infraestructura, saneamiento, salud, bienestar lumínico, bienestar termal)	Medioambiente deteriorado o contaminado en el interior (mala calidad de los materiales de construcción o tecnologías aplicadas a estructura de la vivienda, enfermedades) y exterior de la vivienda (ruidos, contaminación, carencia de parques públicos).

Fuente: Elaboración propia a partir de datos de ONU Hábitat (Programa Estratégico 2020-2023, prorrogable a 2024-2025).

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HOWEVER, IN THE EUROPEAN PILLAR OF SOCIAL RIGHTS,

WE DO NOT FIND ANY MENTION TO THE ENVIRONMENT (PROTECTION, PREVENTION OF POLLUTION) NOR TO INTERNET OF THE THINGS RELATED TO HOUSING & HOUSING RIGHTS

THE UTOPIA

PACHAMAMA



"Pachamama vestida de color y vida"
Obra de Roberto Mamani Mamani
(tiza sobre papel de 70 x 50 cm)

CONSTITUTIONS OF BOLIVIA AND ECUADOR

THE FACTS

The New Spanish Housing Law

Ley 12/2023, de 24 de mayo, por el derecho a la vivienda. BOE 124, de 25/05/2023.

Keywords

Tecnología 0

Internet de las cosas 0

Domótica 0

Casas inteligentes 0

Internet 0

Medioambiente 0

Banda ancha 0

Repercusión ambiental 1 mention in the Statement of the Explanatory Memorandum of the Law.

Exclusion (social o residential) 18 times

Energía 3 times

THE FACTS

DIGITAL GAPS

Gender

Age

Income

Ethnicity

Etc.

THE FACTS

USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES PRODUCTS. POPULATION FROM 16 TO 74 YEARS OLD. YEAR 2022.

INTERNET OF THE THINGS (IoT)

	Use of some connected gadgets	Use of gadgets connected to the Internet: providing of energy to the house,	Use of gadgets connected to the Internet: alarm security systems	Use of gadgets connected to the Internet: electric home appliances	Use of gadgets connected to the Internet: virtual assistant smart speaker	Non-applicable or do not use any of these gadgets No usa ninguno de esos dispositivos
Users of the Internet in the last 3 months						
Net monthly household income: Less than € 900	31,2	9,6	6,0	14,4	16,6	68,8
Net monthly household income: From € 900 to Less than € 1.600	34,1	11,1	9,8	15,1	19,5	65,9
Net monthly household income: From € 1.600 to Less than € 2.500	45,9	13,0	12,7	18,5	28,6	54,1
Net monthly household income: From € 2.500 to Less than € 3.000	48,2	14,8	14,1	16,9	31,9	51,8
Net monthly household income: € 3.000 or more	53,7	16,7	20,6	21,1	32,9	46,3
Net monthly household income: DK/DA	39,7	10,3	10,4	19,0	23,6	60,3

Source: Own elaboration based on data provided by the Spanish National Statistics Institute (INE)

THE FACTS

INTERNET OF THE THINGS			
Last updated:		19/09/2023 11:00	
Time frequency		Annual	
Individual type		Individual living in a household with income in first quartile	
Individuals used internet-connected thermostat, utility meters, lights, plug-ins or other internet-connected solutions for energy management for their home			
Unit of measure	Percentage of individuals		
	2020	2021	2022
European Union - 27 countries (from 2020)	5,99	e	:
Euro area (EA11-1999, EA12-2001, EA13-2007)	8,39	e	:
Belgium	4,93		:
Bulgaria	0,62		:
Czechia	0,30		:
Denmark	7,89		:
Germany	3,36		:
Estonia	10,81		:
Ireland	8,03		:
Greece	0,99		:
Spain	4,44		:
France			:
Croatia	2,38		:
Italy			:
Cyprus	0,47		:
Latvia	2,83		:
Lithuania	0,56		:
Luxembourg	6,36		:
Hungary	1,60		:
Malta			:
Netherlands	56,29		:
Austria	2,95		:
Poland	1,29		:
Portugal	3,31		:
Romania	0,61		:
Slovenia	8,18		:
Slovakia	1,15		:
Finland	4,22		:
Sweden	4,55		:
Iceland			:
Norway	12,10		:
United Kingdom			:
Bosnia and Herzegovina			:
Montenegro			:
North Macedonia	1,05		:
Albania			:
Serbia			:
Türkiye			:
Kosovo (under United Nations Security Council Resolution 1244)	1,63		:

THE FACTS

INTERNET OF THE THINGS (IoT)

Last updated:

9/09/2023 11:00

Time frequency

Annual

Individual type

All Individuals

Individuals used internet-connected thermostat, utility meters, lights, plug-ins or other internet-connected solutions for energy management for their home

Unit of measure

Percentage of individuals

	2020		2022
European Union - 27 countries (from 2020)	8,28	e	10,09
Euro area (EA11-1999, EA12-2001, EA13-2007)	10,02	e	11,61
Belgium	10,25		14,13
Bulgaria	2,08		1,15
Czechia	2,85		5,13
Denmark	11,45		14,57
Germany	8,06		7,11
Estonia	14,79		16,07
Ireland	13,63		21,41
Greece	1,70		3,65
Spain	7,85		11,77
France	:		10,77
Croatia	3,52		5,58
Italy	1,63		4,38
Cyprus	1,07		6,59
Latvia	3,44		4,69
Lithuania	2,45		5,31
Luxembourg	12,39		10,74
Hungary	4,44		5,18
Malta	8,25		8,67
Netherlands	68,72		65,69
Austria	5,46		14,57
Poland	2,27		3,33
Portugal	4,00		6,34
Romania	0,66		2,09
Slovenia	10,03		9,28
Slovakia	2,53		3,94
Finland	7,78		12,35
Sweden	13,30		15,94
Iceland	11,57		:
Norway	17,38		26,12
United Kingdom	18,53		:
Bosnia and Herzegovina	0,60		:
Montenegro	2,56		0,81
North Macedonia	1,32		:
Albania	0,65		4,44
Serbia	1,50		1,61
Türkiye	:		1,57
Kosovo (under United Nations Security Council Resolution 1244)	4,52		:

THE FACTS

Dataset: **INTERNET OF THE THINGS**
Last updated: 19/09/2023 11:00
Time frequency: Annual
Individual type: Individual living in a household with income in second quartile

Individuals used internet-connected thermostat, utility meters, lights, plug-ins or other internet-connected solutions for energy management for their home

Unit of measure	Percentage of individuals		
GEO (Labels)	2020		2022
European Union - 27 countries (from 2020)	7,40	e	:
EURO AREA	9,63	e	:
Belgium	4,65		:
Bulgaria	1,28		:
Czechia	0,69		:
Denmark	6,81		:
Germany	4,69		:
Estonia	11,63		:
Ireland	18,42		:
Greece	1,07		:
Spain	7,85		:
France	:		:
Croatia	4,06		:
Italy	:		:
Cyprus	0,79		:
Latvia	3,25		:
Lithuania	1,10		:
Luxembourg	10,08		:
Hungary	3,11		:
Malta	:		:
Netherlands	66,45		:
Austria	2,62		:
Poland	1,52		:
Portugal	3,03		:
Romania	0,25		:
Slovenia	10,02		:
Slovakia	1,04		:
Finland	3,73		:
Sweden	10,30		:
Iceland	:		:
Norway	12,99		:
United Kingdom	:		:
Bosnia and Herzegovina	:		:
Montenegro	:		:
North Macedonia	1,50		:
Albania	:		:
Serbia	:		:
Türkiye	:		:

THE FACTS

INTERNET OF THE THINGS			
Last updated:		19/09/2023 11:00	
Time frequency		Annual	
Individual type		Individual living in a household with income in third quartile	
Individuals used internet-connected thermostat, utility meters, lights, plug-ins or other internet-connected solutions for energy management for their home			
Unit of measure	Percentage of individuals		
	2020		2022
European Union - 27 countries (from 2020)	9,69	e	:
Euro area (EA11-1999, EA12-2001, EA13-2007)	12,47	e	:
Belgium	7,59		:
Bulgaria	2,40		:
Czechia	3,12		:
Denmark	11,30		:
Germany	7,99		:
Estonia	14,46		:
Ireland	13,18		:
Greece	1,52		:
Spain	8,11		:
France	:		:
Croatia	3,73		:
Italy	:		:
Cyprus	1,22		:
Latvia	2,42		:
Lithuania	2,80		:
Luxembourg	16,98		:
Hungary	3,47		:
Malta	:		:
Netherlands	73,65		:
Austria	4,99		:
Poland	2,82		:
Portugal	3,37		:
Romania	0,72		:
Slovenia	10,11		:
Slovakia	2,43		:
Finland	9,10		:
Sweden	14,61		:
Iceland	:		:
Norway	20,62		:
United Kingdom	:		:
Bosnia and Herzegovina	:		:
Montenegro	:		:
North Macedonia	0,55		:
Albania	:		:
Serbia	:		:
Türkiye	:		:
Kosovo (under United Nations Security Council Resolution 1244)	6,34		:

THE FACTS

INTERNET OF THE THINGS			
Last updated:		19/09/2023 11:00	
Time frequency		Annual	
Individual type		Individual living in a household with income in fourth quartile	
Individuals used internet-connected thermostat, utility meters, lights, plug-ins or other internet-connected solutions for energy management for their home			
Unit of measure	Percentage of individuals		
	2020		2022
European Union - 27 countries (from 2020)	13,10	e	:
Euro area (EA11-1999, EA12-2001, EA13-2007)	17,61	e	:
Belgium	15,51		:
Bulgaria	3,11		:
Czechia	4,90		:
Denmark	15,70		:
Germany	12,86		:
Estonia	19,74		:
Ireland	19,98		:
Greece	3,53		:
Spain	11,05		:
France	:		:
Croatia	6,31		:
Italy	:		:
Cyprus	1,40		:
Latvia	4,99		:
Lithuania	5,93		:
Luxembourg	22,68		:
Hungary	6,80		:
Malta	:		:
Netherlands	75,54		:
Austria	9,73		:
Poland	2,95		:
Portugal	5,87		:
Romania	0,80		:
Slovenia	13,15		:
Slovakia	5,79		:
Finland	13,87		:
Sweden	20,82		:
Iceland	:		:
Norway	22,64		:
United Kingdom	:		:
Bosnia and Herzegovina	:		:
Montenegro	:		:
North Macedonia	2,74		:
Albania	:		:
Serbia	:		:
Türkiye	:		:
Kosovo (under United Nations Security Council Resolution 1244)	2,71		:

CONCLUSIONS

DIGITAL GAPS (& HOMES & ENVIRONMENT) ARE & WILL BE WIDENING IN THE NEAR FUTURE.

MUCH BIGGER SOCIAL EXCLUSION

SOCIAL SMART HOMES IS A SOLUTION BUT, AT LEAST IN SPAIN, FOR THE TIME BEING IS A "LOST OPPORTUNITY"

STATISTICS

INE. Condiciones de vida. Nivel y condiciones de vida (IPC)
Encuesta sobre equipamiento y uso de tecnologías de información y
comunicación en los hogares 2022

<https://www.ine.es/dynt3/inebase/es/index.htm?padre=8922&capsel=8927>

STATISTICS

EUROSTAT

Internet of Things - use

https://ec.europa.eu/eurostat/databrowser/view/isoc_iiot_use_custom_8540705/default/table?lang=en