

ACTION PLAN

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INnovation and Technology ENhancing Customer Orlented Health SerVicEs PGI06004





A Vision for an Eco-Island Policies related to the Health Sector and the Elderly in Gozo

INnovation and Technology ENhancing Customer Orlented Health SerVicEs **INTENCIVE Interreg Europe**

> **Information Management Unit Ministry for Gozo**



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Glossary

AHA	Active and Healthy Ageing
AAL	Ambient Assisted Living
AAT	Ambient Assisted Technologies
EIP	European Innovation Partnership
EPSCO	Employment, Social Policy, Health and Consumer Affairs Council
ESF	European Social Fund
EU	European Union
GP	General Practitioners
GRDA	Gozo Regional Development Authority
GRDS	Gozo Regional Development Strategy
IMU	Information Management Unit
IMI	Innovative Medicines Initiative
INTENCIVE	INnovation and Technology ENhancing Customer Orlented Health SerVicEs
LP	Labour Party
MS	Member States
MGOZ	Ministry for Gozo
MFH	Ministry for Health
MSCAA	Ministry for Senior Citizens and Active Aging
NSO	National Statistics Office
TCN	Third Country Nationals
VCMS	Virtual Care Monitoring Station

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Abstract

The Maltese Islands are ageing, resulting in challenges in providing long-term quality care for the elderly. The state of play in the region of Gozo, the smaller sister island to Malta, is more acute as ageing is more prevalent.

The objective of the Ministry for Gozo project under the INTENCIVE programme is to incorporate the application of e-health innovative and maturing technologies within the social policy aspect of the Eco-Gozo policy instrument. The Government oriented the Gozo regional strategy development framework following the 2017 general election from the Eco-Gozo Action Plan to a 10-year Gozo Regional Development Strategy.

The Action Plan developed by the Ministry for Gozo under the INTENCIVE programme is directed towards applying eHealth technologies and innovation that address needs and issues to:

- (a) Improving the quality of life of persons who are institutionalised in elderly care residences. A pilot activity consisting of a **Social Al Assistant Robot within a residential home for the elderly** is presented.
- (b) Allowing for the continued integration of persons suffering from neurodegenerative diseases such as Alzheimer's and other forms of dementia in their local communities by living safely in personal residences. A pilot activity consisting of **dementia e-Care Monitoring in private residential homes in a local community** is presented.

The two pilots were identified through the INTENCIVE programme interregional learning and best practice sharing on elderly care technology innovations and implementation experiences.

In July 2021, the Minister for the region of Gozo published for national and regional consultation the draft Gozo Regional Development Strategy prepared by the Gozo Regional Development Agency. The Ministry for Gozo project team embarked on a process directed to incorporate the INTENCIVE Action plan under Priority Area 6 of the Gozo Regional Development Strategy, titled 'Social Development'. Priority Action 6 sets the following among the key goals for this policy domain:

- o Strengthening Gozo's society and its communities' underlying social capital.
- Addressing the needs of the elderly members and promoting active ageing.
- Ensuring adequate social development infrastructure.

The Ministry for Gozo following discussions with the Gozo Regional Development Authority in Quarter 4, 2021 successfully incorporated the Action Plan under initiative M6.4, titled 'Aging Support Services' of the said Strategy.

Since the start of 2022, the Ministry for Gozo is now working on establishing the appropriate framework for implementing the Action Plan. Implementation is subject to the attainment of project financing.

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01. Introduction

The Maltese Islands face a considerable challenge in providing good quality health care for the elderly in the forthcoming future. Major issues dictate the quality and breadth of service provision, which will place considerable pressure on the public health model as it is understood today.

Similarly, as with other developed countries, Malta's demographics are ageing. This is increasingly placing pressure on society regarding support infrastructure for the elderly and new challenges concerning active ageing. Malta's population is expected to increase by 199,964 or 39% between 2020 and 2070 – to approximately 700,000 persons. The table below presents the projected 65+ cohort growth over this period.

Table 01: Population Aging

	2015	2020	2050	2070
% Aged >65	18.5	24.4	26.9	30.6
% Aged >80	4.0	7.7	10.0	13.2

A second issue is a longevity: male life expectancy at 61, 65 and 70 years of age increased respectively by 2 years, 1.8 years and 1.8 years from 2012 to 2019; whilst female life expectancy for the same age groups increased by 1.7 years, 1.5 and 1.6 years. As of 2021, male and female life expectancies are 80 and 85 years, respectively.

Malta's current model is biased towards institutionalisation in terms of long-term care. Given this bias towards institutionalised care, community-based support to secure independent support living is yet to achieve a level of maturity.

The elderly (60+) Gozitan population is 4.64% larger when compared to the Maltese population – constituting 28.85% of the Gozitan population compared to 24.21% of Malta's. The 80+ population in Gozo is 1.63 p.p higher than that of Malta: 18.70% compared to 17.06% (Scerri and Scerri, 2012). Research estimates that by 2030 a total number of 10,000 persons, or 2.3% of the population, will suffer from a dementia condition (National Statistics Office (NSO), 2021).

The application of the policy instrument under the INTENCIVE project, as articulated in the project application by the Ministry for Gozo (MGOZ) Information Management Unit (IMU) team, is that of identifying a "number of innovative eHealth solutions addressing, in particular, the needs of the elderly and those who have dementia." It is further added that "the improvement of the policy instrument will be made mainly by implementing new projects based on the interregional learning process and that will address those policies related to the Health Sector and the Elderly in Gozo." 2

02. Policy Instrument Addressed

The objective for the MGOZ project under INTENCIVE is to incorporate the application of e-health innovative and maturing technologies within the social policy aspect of the Eco-Gozo policy instrument. During the course of this project, the Ministry for Gozo oriented its regional development framework from the Eco-Gozo Action Plan to the Gozo Regional Development Strategy (GRDS). Section 04 below describes the policy context – its drivers at both a regional, national and EU level and its evolution from when the MGOZ project team decided to explore its participation and subsequently participate in the INCENTIVE project.

¹ Pg 14, Project Acronym: INTENCIVE, Index Number: PG106004, Version No 8, Interreg Europe

² Ihid

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03. Policy Context

03.1 Gozo Regional Strategy Development

The Government in 2009 launched the Eco-Gozo Action Plan titled 'Eco-Gozo: A Better Gozo'. The Eco-Gozo Action Plan was established as priority areas for regional development: (a) the economy, (b) the environment, (c) society, and (d) identity.³ Implementation of this Action Plan was initiated in 2010, where-in a special designated Eco-Gozo Directorate was set up and assigned responsibility. In March 2013, a new party was elected to the government. In its electoral manifesto, the Labour Party (LP), in Pledge 36 relating to the region of Gozo, stated that it will "continue to build on and develop further the eco-Gozo concept.⁴

The new administration tasked the Eco-Gozo Directorate to draw up a new Eco-Gozo Action Plan that also incorporates its priorities for the region of Gozo as established in its electoral manifesto. A draft strategy was presented to MGOZ. In June 2017, an early election was called by the LP in government. By that date, the new Eco-Gozo strategy was yet to be approved. The new electoral programme established the following, amongst others, pledges concerning the region of Gozo⁵:

- (a) Pledge 05: A GRDS is drawn up for the Island of Gozo.
- (b) Pledge 06: A Gozo Regional Development Authority (GRDA) responsible for coordinating the implementation of the GRDS was to be set up.

The chapter on health in the electoral manifesto in pledge 45 stated that the government would apply e-health technologies to manage and monitor chronic and other diseases⁶.

The LP was re-elected to the government. A new minister was assigned the Gozo portfolio. The new Minister, on her appointment, engaged an Adviser to lead the design of the GRDS and the establishment of the GRDA. The work on the drafting of the GRDS was initiated in October 2017. Until the GRDS was completed and approved by the Cabinet, the Eco-Gozo 2010-2012 Action Plan remained the key strategic document. This, however, was calibrated to include the government's direction for the region of Gozo as set in its 2013-2017 administration and the incorporation of the further new direction as set out in the 2017 electoral manifesto.

The approach adopted for the drafting of the GRDS included a process of both pre-drafting and post-drafting consultation. Six consultative working groups were established, led by the designated policyholders within MGOZ. These consultative working groups covered the following six policy domains: (a) eco-Gozo, (b) infrastructure and accessibility; (c) social development; (d) rural development; (e) economic development and human capital; and (f) tourism.

The IMU, the MGOZ partner in the INTENCIVE project, led the policy domain on infrastructure and accessibility. This domain included the application of ICT and innovation both as a horizontal and vertical policy instrument transcending the other 5 policy domains.

Through this process, e-health and innovation technologies were discussed and identified in consultation with the working group responsible for the social development policy domain. Amongst the potential e-health and e-care technologies and innovations identified were those that can improve the quality of life of elderly persons, ambient assisted technologies (AAT) for a safe, independent supported living of elderly persons in residental care homes and private residences within their communities.

³ Pg 11, Eco-Gozo - A better Gozo: Proposed Action Plan 2010-2012, Ministry for Gozo, 2009

⁴ Malta Tagħna Lkoll, Electoral Manifesto, Labour Party, Malta, 2013

⁵ L-Aqwa Zmien, Electoral Manifesto, Labour Party, Malta, 2017

⁶ Ibid

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Figure 01: Development of the Strategy / Action Plan for the Region of Gozo



In December 2019, the House of Representatives enacted the Gozo Regional Development Act [CAP 600]. Amongst others, the Act assigned the following functions to the GRDA:

- "(a) to consult with the government, the private sector, constituted bodies and non-governmental organisations, and private citizens in connection with any work which it intends to carry out with regard to the design of a regional development strategy for Gozo, subsequent to which a report relating to such consultation process is to be presented to the Minister for approval, with or without amendments, or otherwise;
- (c) to own and steward the implementation of the regional development strategy for Gozo once this is approved by the Minister;
- (g) to monitor the implementation process of the actions and measures under the regional development strategy for Gozo and take actions within the assigned parameters or recommend action to the Minister to ensure smooth implementation of such measures and actions;"⁷

In January 2020, a new minister for the region of Gozo was appointed. Measures were taken in 2020 to implement the setting up of the GRDA. The GRDA, by April 2020, was sufficiently mobilised to take up the process leading to the review of the draft GRDS under the direction of the new Minister and its preparation and launch for national and regional consultation.

In July 2021, the Minister for the region of Gozo published for national and regional consultation the GRDS prepared by the GRDA. The draft GRDS published for consultation, which covers the period 2021-2030, identifies 8 priority policy domains directed to move Gozo forward. These are: (a) spatial planning and sustainable urban development; (b) infrastructure and accessibility; (c) sustainable tourism; (d) social development; (e) economic and talent development; (f) new economy; (g) rural development and Eco-Gozo; and (h) culture, heritage, and arts.

⁷ Article 8, Functions of the Authority, Gozo Regional Development Authority Act, CAP 600, December 2019

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Priority Area 6 of the GRDS, titled 'Social Development' sets the following among the key goals for this policy domain8:

- o Strengthening Gozo's society and its communities' underlying social capital.
- o Addressing the needs of the elderly members and promoting active ageing.
- Ensuring adequate social development infrastructure.

The INTENCIVE Action Plan falls under initiative M6.4, titled 'Aging Support Services' of the said Strategy. Initiative M6.4 states⁹:

"In addressing the matter of ageing, a two-pronged strategy should be adopted. The first relates to the building/completion of residential care facilities for the elderly. The second prong is directed towards supporting elderly persons to continue to live in the community.

To date, no detailed demographic study of how Gozo's population will evolve in the medium and long term is available. For this purpose, a study should be carried out to understand potential demographic behaviour in Gozo over the medium and long term and what implications this has on Gozo's elderly appropriate infrastructure, "community, institutions and policies."

03.2 National Level Strategies

The national-level strategies that are specifically related to this Action Plan are presented hereunder:

- 01. National Strategy for Active Ageing: 2014-2020, Parliamentary Secretariat for Rights of Persons with Disability and Active Aging (2014): The Strategy is premised upon three major themes: active participation in the labour market, participation in society, and independent living. The Strategy presents the following policy recommendations: (a) strengthening the levels of older and ageing workers; (b) improving social inclusion in later life; and (c) improving independent living in later life.
- 02. Strategy for Improving the Management and Admission and Discharge of the Elderly from the General Acute Hospitals, Ministry for Health (2010): The Strategy emphasised that need to balance community and private residential care. The strategy underlined the importance of elderly care community and private residences to be designed and supported by AAT and e-health technologies to enable elderly people to secure independent living to the extent possible.
- 03. Empowering Change: A National Strategy for Dementia in the Maltese Islands: 2015-2013; Parliamentary Secretariat for Rights of Persons with Disability and Active Aging': Recognizant of the government's limited health and supporting infrastructure, the government in 2015 issued a national strategy for dementia. The strategy identified the following strategic thrusts: (a) education and awareness; (b) timely diagnosis and intervention; (c) workforce development; (d) improved dementia management and care; (e) ethical care for dementia management and care; and (f) research.
- 03. Beyond 2016: Strategic and Operations Review of the Department for Primary Health'; Ministry for Health: The strategic review recommended the "adoption of a holistic and robust telehealth for improved prevention (education by digital communication) and online monitoring and management of chronic conditions management directed to significantly increase prevention management, quality of care, improve risk and reduce costs specifically with the regard the Primary Health Care Department and more generically, across the health sector."

⁸ Pg 26, Gozo Regional Development Strategy, Consultation Document, Gozo Regional Development Authority, July 2021

⁹ Pg 27, Ibid

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03.3 European Level Strategies

The European level strategies that are specifically related to this Action Plan are presented hereunder:

- 01. The European Commission (EC) recently put demography high on the EU policy agenda. In June 2020, it presented a report on the impact of demographic change and its likely impact on the European Union (EU). The first outcome of this report was the green paper issued by the Commission in January 2021 titled 'Fostering solidarity and responsibility between generations' (EC:2021). This green paper aims to launch a broad policy debate on ageing to discuss options on how to anticipate and respond to the challenges and opportunities it brings, taking into account the UN 2030 Agenda for Sustainable Development and UN Decade for Healthy Ageing.
- 02. The resolution of 19th January 2011 by the European Parliament on the European initiative called for dementia to be made an EU health priority, urging the Member States (MS) to develop specific national plans and strategies and facilitate access to research funding. Following this resolution, most MS introduced national strategies. There have been several positive developments within the EU regarding dementia-related initiatives. In 2015 the Employment, Social Policy, Health and Consumer Affairs Council (EPSCO) adopted the Luxembourg EU Presidency conclusions, which included the need to emphasise supporting people with dementia in Europe.

Additionally, a thematic priority of the third EU Health Programme (2014-2020) included a commitment to 'support co-operation and networking in the Union to prevent and improve the response to chronic diseases including cancer, age-related diseases, and neurodegenerative diseases. Furthermore, programmes such as the second EU Joint Action on Dementia, the Horizon 2020 programme (including the second Innovative Medicines Initiative (IMI)), and the ongoing work on European Pillar on Social Rights (specifically Principle Nine on Work-Life Balance) demonstrate that significant work is ongoing to improve the lives of people with dementia, their families and carers.

04. Action Plan

04.1 Aims and Background

This Action Plan is directed towards the application of eHealth technologies and innovation that address needs and issues relating to elderly persons in residential care and for elderly persons to live securely within their private residence and thus remain integrated within their local community. The specific cohort of elderly related conditions targeted in this regard is neurodegenerative diseases such as Alzheimer's and other forms of dementia and social isolation of elderly persons.

(a) Improve the quality of life of persons who are either institutionalised in elderly care residences

As stated in the introduction, the Maltese Islands and Gozo, more pervasively, face two significant challenges in providing good quality health care for the elderly in the forthcoming future: (a) population ageing; and (b) longevity.

This advocates strategic aims of the national ageing policy directed to prolong living at home or in alternative housing arrangements like elderly community residential houses. There is pressure to improve the quality and availability of home care services and find new ways to provide care at an individual's private residence. Be that as it may, deinstitutionalisation has never been an explicit policy goal in Malta and Gozo, and residential community policy care retains its appeal among many Maltese (Vella: 2018). A Special Eurobarometer survey shows that Maltese and Gozitans were the most likely to favour care in a nursing home for an older person who cannot live at home independently. Residential care is more significant in Malta than most other countries, and demand still outstrips supply (Vella: 2018).

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The government continues to invest in residential care homes for the elderly directly or in partnership with the private sector or the roman catholic church. Ensuring sufficiently quality care for the elderly residential infrastructure remains a key issue. In Gozo, there is only one residential home for the elderly, even though Gozo has a higher ageing population profile than Malta. A second major issue is the supply of carers and nurses to staff residential homes. Supply for geriatric nurses and carers far outstrips demand, and staffing is achieved primarily through imported skilled and semi-skilled third-country nationals (TCN). In essence, therefore, most of the staff at residential care of the elderly are not Maltese – and most are unable to speak the Maltese language, which is a language primarily used by the existing elderly population; and unfamiliar with Maltese customs, norms, and social behaviour, etc. This creates a state of play where many elderly people in residential care homes feel 'isolated' as they cannot create a social interplay with their carers.

In recent years, the rapid development of robot technology has aroused people's interest in using robots to care for and accompany the elderly (Robinson, H.; et al.: 2014). Robots in the healthcare and social sector exist in many forms, serving various purposes and supporting numerous tasks. They are applied in surgeries, rehabilitation, elderly care facilities, or at home as assistants with housework and domestic chores (Dahl & Kamel 2014).

One commonly used type is a social robot. Social robots were developed to interact with humans and robots to support a human-like interaction emotionally. One aspect of the Action Plan is implementing a pilot Social Al Assistant Robot within a residential home for the elderly. The Al social robots identified are presented in the table below.

Table 02: Social Al Robots identified for pilot implementation

Pepper ¹⁰	PARO
A humanoid robot capable of demonstrating body language and perceiving and interacting with its surroundings using facial recognition.	A "pet alternative" and mainly intended for older people in elderly community homes who desire company such as a pet but are unable to do so given residential care homes do not allow for the
Pepper can analyse people's expressions and exhibit voice and emotion recognition. It is designed for a wide range of multimodal expressive gestures and behaviours and is equipped with a tablet. The shape of Pepper was aimed to be gender neutral.	keeping pets. PARO is a gadget that can recognise voices, track motions, and utter endearing little squeaks and whistles. It also remembers behaviours, has touch-sensitive whiskers, which help it interact with humans, and has a bunch of little motors that
The robot is 1.2 m in height, and the voice is child-like (Pandey & Gelin 2018). 'Pepper' is applied in healthcare, education, entertainment, and business domains as a service robot and used for socialising purposes.	enable it to wiggle. PARO has five sensors—light, tactile, auditory, temperature, and posture—that help it come to "life."

The MGOZ IMU team identified Pepper and PARO from interregional learning and best practice experience sharing under the INTENCIVE project. It was shown by the Finnish partners on the INTENCIVE project that considerable research has been carried out in Finland and elsewhere on 'Pepper' and 'PARO' as social robot assistants. The table below presents a cursory review of the literature concerning the application of Pepper and PARO social robots in Finland.

¹⁰ It is to be noted that Bloomberg announced that SoftBank's halted production of the 'Pepper' robot in June 2021 (https://www.bloomberg.com/news/articles/2021-06-29/softbank-mothballs-once-hyped-1-800-pepper-humanoid-robot).

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Table 03: Review of the literature about the application of the identified robots in Finland

Pepper ¹¹	PARO	
Elderly users in several studies: as an assistive walking companion (Piezzo & Suzuki 2017).	Positive for reducing depression in older adults (Chen, S. et al., 2018).	
Evaluating its ability to detect human emotion and humour (Bechade et al. 2019).	Identify barriers that may impede PARO adoption (Moyle W. et al., 2018).	
Investigating older adults' preferences, perceptions, and performances when interacting with a humanoid robot compared to young adults (Feingold-Polak et al. 2018).	Helped in re-duction of physical and verbal agitation (Mervic, M., C., et al., 2018).	
Acting as a "narrative and autobiographical companion" aims to provide access to a life-long memory system of an elderly person with memory problems to maintain social links with their community (Domeny et al. I, 2017).	Found to improve anxiety symptoms (Takayanagi K, Kirita T, Shibata T., 2014).	
Researching the impacts of carer workers' attitudes to Al Robots (Ranten, T., Leppalahti, et al.: 2020).	Help individuals become more active, smiling, relaxed and comfortable, more likely to laugh, and have brighter facial expressions (Jøranson N, 2016).	
Pepper was piloted as a social robot in Finland in two elderly service homes. The study aimed to investigate (Poberznik and Merampi: 2019): Ohow the elderly perceive interaction with 'Pepper.'	PARO was piloted in Finland at a large private care service provider company and at a public organisation providing elderly care services for the residents of a small-sized Finnish municipality to investigate (Niemela, M. et al., 2016):	
What kind of attitudes they have related to the robot.	The expectations that decision-makers in care have for robots.	
How and where they would or would not use 'Pepper'.	How the decision to purchase a robot is made.	
	 Which criteria are used to assess the robot's success (or failure) in real use. 	

This aspect of the Action Plan seeks to apply the Pepper and PARO AI social robots within the elderly residential home in Gozo and replicate the research carried out in Finland in a single combined study. The context of the study is to determine whether an AI social robot can act as a complement for social interaction and interplay and establish a basis for further research. This research is a first in the Maltese Islands.

¹¹ It is to be noted that Bloomberg announced that SoftBank's halted production of the 'Pepper' robot in June 2021 (https://www.bloomberg.com/news/articles/2021-06-29/softbank-mothballs-once-hyped-1-800-pepper-humanoid-robot).

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(b) Allow for the continued integration of persons suffering from neurodegenerative diseases such as Alzheimer's and other forms of dementia in their local communities by living safely in personal residences.

Studies suggest that the care of dementia patients in the Maltese Islands is very much a family affair (Innes et al., 2011), where informal carers are forced to accommodate caring whilst juggling family responsibilities to children and grandchildren and paid work. Such research shows that in Malta's and Gozo's strong extended families networks, family members develop innovative rotating patterns to accommodate individual family members' social and work lives while maintaining their responsibility to their unwell parents (Formosa, 2015). Additionally, carers are mainly negative about the level and suitability of formal dementia services for their relatives' needs, demonstrating the need for both private and specialised dementia and their caregivers living in Malta (Formosa. 2015).

Whilst dementia care institutional infrastructure has strengthened over the years, to date, e-health, or digital health, has yet to be applied in the Maltese Islands to assist families in the care management of relatives with a dementia condition who live in their private residence in the community.

The application of digital health monitoring infrastructure that allows family members to monitor the care of their dementia suffering relatives allows for their continued integration into their communities by living safely in their private residence. Furthermore, the application of such technologies eases the burden of physical monitoring by family members through the remote monitoring of their dementia patients.

The second aspect of the Action Plan is to pilot **dementia e-Care Monitoring in private residential homes in a local community.** The objective of the pilot is to assess the effectiveness of a digital health monitoring infrastructure that allows family members to monitor the care of their relatives living securely and safely in their private residence in the community. The pilot will consist of:

- 01. Setting up of a Virtual Care Monitoring Station (VCMS) tracking in real-time the care of dementia patients about (a) their movement; and (b) night safety.
- 02. Identifying the e-technologies that will be applied for both the station and care monitoring of dementia patients.
- 03. Allowing for the receipt of any form of data from the care monitoring device from the person or private residence in the community to the VCMS, a doctor or carer, the relative/s.
- 04. Establishing the ethical and privacy framework covering the end-to-end monitoring process.
- 05. Establishing the standard operating procedures that result in better care support throughout the appropriate care management value chain.

04.2 Action Plan Activities Implementation and Monitoring

The goal of the MGOZ team for the INTENCIVE project, as described earlier in this document, was to incorporate the application of e-health innovative and maturing technologies within the social policy aspect of the Eco-Gozo policy instrument. As shown, since the INTENCIVE project application was published, the government, as mandated by the 2017 political manifesto, pledged to introduce a 10-year GRDS, replacing the Eco-Gozo Action Plan.

As shown earlier in the document, in July 2021, the responsible Minister for the region of Gozo published for national and regional consultation the draft GRDS. On the 7th of December 2021, the MGOZ project team recommended that the Action Plan be integrated as an implementation task of the GRDS under the initiative M6.4, titled 'Aging Support Services' of the said Strategy. Following discussions and a meeting, the GRDA, on 5th January 2022, responded positively to this request.

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Figure 02: Integrating the INTENCIVE Action Plan within the Gozo Regional Development Strategy



The GRDA has accepted the incorporation of the Action Plan pilots relating to the implementation of the following pilot activies:

- (a) Social Al Assistant Robots within a residential home for the elderly.
- (b) Dementia e-Care Monitoring in Private Residential Homes in a Local Community

under Priority Area 6 of the GRDS, titled 'Social Development' initiative M6.4 titled 'Aging Support Services'. The goal as established by the MGOZ team in the application submitted for the INTENCIVE project is met.

Since the start of 2022, the MGOZ team is now working on establishing the appropriate framework for implementing the Action Plan. As shown earlier in this document, Article 8(1) of the Gozo Regional Development Authority Act [CAP. 600] provides authority to the GRDA to consult and design (8(1)(a)), recommend ((8(1)(b)), own and steward implementation (8(1)(c)); monitor the implementation (8(1)(g)); propose policy matters (8(1)(j)); and formally review (8(1)(f)) the GRDS. The GRDA does not implement the activities and action implementation items identified for each of the strategic thrust.

Ownership for implementation rests with the lead Ministry or government entity assigned responsibility – this can be the regional Ministry itself, a department within the Ministry, or another ministry or government department, depending on the political and administrative locum of responsibility for the action or activity assigned.

The GRDA, however, is empowered by the Act to ensure that implementation, once the GRDS is ratified and approved, is implemented. Article 8(1)(d) of the GRDA Act empowers the GRDA:

"... (d) to draw up performance agreements, as established in Schedule I, with government departments or entities under the responsibility of the Ministry, which are assigned responsibility for



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the implementation of measures and actions identified in the regional development strategy for Gozo ...". 12

Schedule I of the GRDA stipulates that a performance agreement is to be entered into between the GRDA and an implementing government department and, or entity with MGOZ that stipulates "the:

- 01. Actions and measures under the regional development strategy for Gozo delegated to the implementing Government department and, or entity within the Ministry for Gozo.
- 02. The responsibilities, relationships and accountability parameters between the Gozo Regional Development Authority as the 'purchaser' of the implementation service and the Government department and, or entity within the Ministry for Gozo as the 'supplier' of the implementation service.
- 03. The planning, reporting and control framework established between the Gozo Regional Development Authority as the 'purchaser' of the implementation service and the Government department and, or entity within the Ministry for Gozo as the 'supplier' of the implementation service.
- 04. The budget management framework for the specified action and, or measure established between the Gozo Regional Development Authority as the 'purchaser' of the implementation service and the Government department and, or entity within the Ministry for Gozo as the 'supplier' of the implementation service.
- 05. Key performance indicators and targets."13

Following the formal authorisation of the inclusion of the MGOZ INTENCIVE Action Plan in the GRDS by the GRDA, the MGOZ project team, to date, has carried out the following activities:

- 01. Completed a comprehensive project brief of the Action Plan work programmes, financing, tasks, partners, and implementation timeframes (subject to financing, etc.).
- 02. Initiated discussions with the GRDA concerning the project brief.

The table below presents key implemented activities and activities underway and planned.

Table 04: Status of Actions

Activities	Time Frame	Responsible body	Status	KPI	Monitoring
INTENCIVE review of best practice technologies and innovations through discussions with partners and review of their initiatives.	July 2021 – March 2022	IMU Partners	Completed	Q4 2021	Completed
Identify projects based on INTENCIVE best practices to propose to GRDA for inclusion under GRDS.	October 2021	IMU Partners	Completed	Q4 2021	Completed
Acceptance by GRDA of the INTENCIVE Action Plan for	December 2021	IMU GRDA	Completed	Q4 2021	Completed

¹² Article 8, Functions of the Authority, Gozo Regional Development Authority Act, CAP 600, December 2019

¹³ Schedule I, Functions of the Authority, Gozo Regional Development Authority Act, CAP 600, December 2019

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inclusion in post- consultation GRDS.					
MGOZ INTENCIVE Project Participation Objective					
Completion of the INTENCIVE Action Plan comprehensive project brief for submission to GRDA	March 2022	IMU	Completed	Q1 2022	Completed
Presentation of the INTENCIVE Action Plan comprehensive project brief for discussion with and approval by the GRDA	June 2022	IMU MGOZ GRDA	To be submitted	Q2 2022	Monthly
Identification of financing for the INTENCIVE Action Plan from the 2022 government budget	June 2022	IMU MGOZ	Underway	Q2 2022	Monthly
Subject to the outcome of obtaining financing under the 2022 government budget, submit a budget proposal for the 2023 government budget	June 2022	IMU MGOZ	To be initiated	Q2 2022	Monthly
Drawing up and signing of Performance Agreement under Schedule 1 of the GRDA Act [CAP. 600]	October 2022	IMU MGOZ GRDA	To be initiated	Q4 2022	Monthly
Implementation	To be determined	IMU MGOZ GRDA	To be initiated	Q2 2022	Weekly

04.3 INTENCIVE Interregional Learning and Impact of MGOZ IMU's Action Plan

The COVID-19 pandemic had a limiting impact on the sharing of interregional learning and best practices and experiences. The INTENCIVE project was premised on the carrying out of field studies with the participating partners. These field studies were planned to allow for in-depth learning sessions, active demonstrations, site visits, etc. Field visits were planned for several days to allow for extensive understanding and sharing of experiences and best practices.

As a result of the COVID-19 pandemic, the MGOZ IMU project team participated in four (4) online study visits only. On 24th November 2021, a physical study visit was organised by the MGOZ IMU in Gozo. Thus, interregional learning was carried out through e-meetings, e-demonstration sessions, and INTENCIVE's good practices databases (https://projects2014-2020.interregeurope.eu/intencive/good-practices/). Whilst these alternative channels of interregional learning were valid, they do not replace the more extensive learning, knowledge, and best practice experience sharing that the MGOZ IMU project team would have benefited from if INTENCIVE had proceeded as planned.

The immediate beneficial impact that the MGOZ IMU project team garnered from interregional learning was more oriented to the technology innovations and implementation experiences relating elderly persons and their care and less in terms of incorporating the identified action plans in regional policy domains. As shown earlier, the MGOZ IMU team was in a unique position to actively participate in developing a new GRDS designed to replace the Eco-Gozo Action Plan. Thus, the MGOZ IMU team,

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in terms of positioning its Action Plan objectives within regional policy and strategy planning, design, and implementation, was able to seamlessly participate in the formal process launched by the regional responsible Ministry and subsequently by the GRDA.

The Table below shows how the MGOZ IMU project team benefitted as follows from INTENCIVE's interregional learning.

Table 05: INTENCIVE Interregional Learning and Impact of MGOZ IMU's Action Plan

Social Al Robot	Partner:	
	The Seinajoki University of Applied Sciences (Regional Council of South Ostrobothnia), Finland.	
	On May 2021 a presentation of good practice titled Showrooms for well being technologies' was held online for the INTENCIVE partners. In this presentation experiences with the two social AI robots were demonstrated. The social AI robots demonstrated were: Pepper and PARO.	
	A repeat online session was held on 24th February 2022 (Annex II).	
	Subsequent to these demonstrations and sharing of best practices the MGOZ IMU project team undertook desk-top research on research and application use of the Pepper and PARO AI social robots in Finland and elsewhere (Pandey & Gelin 2018; Piezzo & Suzuki 2017; Bechade et al. 2019; Feingold-Polak et al. 2018; Domeny et al. I, 2017; (Ranten, T., Leppalahti, et al.: 2020; Poberznik and Merampi: 2019; Rantanen, T., Leppalahti, T., et al. 2020; Lappeenranta, L, & Kyrki, V 2017; Hung, L., Liu, C., et al. 2019, Latikka, R. et al., 2021; Belcahde, L., et 2019, etc.).	
Dementia monitoring	Partners responsible for the:	
	CoME project (Hungary). https://www.interregeurope.eu/good-practices/alarm-system-for-the-elderly elderly	
	Elderly Alarm system (Finland) https://www.interregeurope.eu/good-practices/showrooms-for-wellbeing-technology	
	 Night-time distance monitoring (Finland) https://www.interregeurope.eu/good-practices/night-time-distance-monitoring 	
	Subsequent to these demonstrations and sharing of best practices the MGOZ IMU project team undertook desk-top research on research and application use of dementia assistive technology (Vermeer, Y. et al., 2018; Gathercole, B. et al., 2021; Bonner, S., & Idris, T., 2012; Sriram, V. et al., 2020; Gibson, G. et al., 2015; Zamiri, M.; Sarraipa, J.; et al., 2021; Stapleton, P., & Delaney, S., 2015; Howard, R. et al., 2021; Nihof, N., 2013; Gagnon, M. et al., 2020; Bennechere, B., & Shakian, J., B., 2020, etc.).	

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05. Stakeholders Involved

The stakeholders involved are presented in the table below.

Table 06: Stakeholders

	Learn III I I I I I I I I I I I I I I I I I
Gozo Regional Development Authority	Established by legislation and is responsible for design and monitoring through performance agreements with government and other entities, the GRDS.
Department for EU Programmes and Initiatives – MGOZ	The Department's support and experience will be leveraged to identify EU and MS financing instruments for which financing applications may be submitted.
Elderly Residential Care Home in Gozo	Pepper and PARO social AI robots will be introduced for research purposes in this home. Together with senior health care staff and carers, the manager of the home will be involved in the design and implementation of the research project.
Families with a relative who has a dementia condition	Six households with different member configurations will be identified for the dementia remote monitoring pilot. The purpose of having a different mix of household composition is to test the best environment within which a VMCS and patient monitor work best.
General Practitioners	A strong pillar of the health system in the Maltese Islands is the General Practitioners ((GP) - also known as family) doctors. The GPs servicing the patients will be invited to participate in the pilot.
Community Care Providers	Community care support is provided by both the government and private sector operators. The following government entities will be involved in the pilot:
	 Primary Health Department within the Ministry for Health (MFH). Active Aging Unit within the Ministry for Senior Citizens and Active Aging (MSCAA). Social and Elderly Care Unit in the MGOZ.
	To the extent possible, one of the households involved in the pilot will be serviced by a private care operator to model the dementia care monitoring and action within such an environment.
Telemedicine Centre	The Primary Health Care department has recently set up a 24*7*365 Telemedicine Centre. Partnering with this Centre is seen as an important aspect of the project as the best practice experience garnered by the Centre can be applied to the project, whilst the research project can provide knowledge on the application of digital health concerning dementia care – which can subsequently be applied for a national rollout.
Local Council	Gozo is one of 5 regions in the Maltese Islands. There is a Local Council for each major village/town within the Gozo Region. A local council will be invited to participate in the pilot

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	to explore and understand the local council's role in a community-based dementia-friendly framework.
Active Aging and Community Care Agency	This Department is responsible for policy design, implementation, and management of elderly residential homes owned by the state. Their involvement in the pilot is sharing residential elderly care experiences, particularly in drawing up the case studies.
INTERRIG INTENCIVE partners	 The Seinajoki University of Applied Sciences will be invited to support the project concerning: Best practices experiences were carried out with Finland's social AI robotic experience. Introducing MGOZ to two elderly homes in Finland where 'Pepper' was piloted as a social robot. Partner responsible for the CoME project (Hungary). Partner responsible for the Elderly Alarm system (Finland) Night-time distance monitoring (Finland).

06. Costs and Funding Opportunities

Incorporation of the Action Plan proposed pilot initiatives concerning Priority Area 6 of the GRDS, titled Social Development' was accepted for inclusion in the GRDS by the GDRA in December 2021. It is to be noted that the government financial cycle is on a calendar year basis – from January to December. Budgetary planning by Ministries and Departments initiates in March. An iterative process is undertaken, including issuing a pre-budget document normally in July, which sets out the government's proposed objectives for the forthcoming financial year. The pre-budget document acts as a basis for national consultation and the submission of proposals by constituted bodies, political parties, and other stakeholders. The budget is normally announced by early November.

The government tabled at the House of Representatives the budget for 2022 in early October 2021. The acceptance by the GRDA of the Action Plan as activities under the GRDS occurred following the launch of the budget. This means that no funds for the 2022 government's budgetary cycle are allocated to MGOZ to implement the Action plan activities this year. The implementation of the activities under the Action Plan is estimated at €200,000 − inclusive of VAT, which is a non-refundable expense for Ministries and Departments. This excludes other taxes such as customs duties, etc.

Table 07: Estimated Costs

	€
	Inclusive of 5% contingency
Policy design, procedures, protocols, workflow, etc.	10,000
Digital health ethics, data protection, research ethics, etc.	10,000
Technologies (dementia monitoring, PARO, Pepper, etc.), programming, etc.	40,000
Al social robots' storytelling, vocabulary, speech, etc.	30,000
Research (qualitative)	70,000

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VAT (18%) Total	30,600 200,600
Externalisation of project	10,000

The MGOZ project has initiated a process to see whether funding from the MGOZ's 2022 budget can be vired to initiate implementation this year. If this is not possible, then the MGOZ INTENCIVE team will submit a budget project financing proposal for financing the Action Plan activities under the 2023 government budget.

Although the estimated cost for implementing the Action Plan activities is not significantly high, the fact is that Malta, like the other EU MS, is facing significant economic uncertainty resulting from the pandemic COVID-19 impact on the economy, the war in Ukraine and its impact on the price of oil, gas, and cereals, the bootle necks in supplies and logistics and increasing prices of transportation, and increasing inflation.

Therefore, there is no guarantee that funds may be made available either through virements from the 2022 financial year allocation or in a new 2023 budget. The GRDS, as stated earlier, has a ten year horizon period. Given the global and European economic uncertainties, the MGOZ INTENCIVE team will work with the GRDA to determine when best timing to implement these activities if evolving events may render it impossible for the government to finance this initiative in the immediate and short term.

Be that as it may, the MGOZ INTENCIVE team will work with the Directorate for Policy Development and Programme Implementation within MGOZ to identify and apply alternative financing to the government. The following are third party financing instruments currently identified and which the team will be following up on:

- 01. Malta Fusion Investment Fund: This is an applied R&I investment fund managed by the Malta Council for Science and Technology. Applications must include a consortium that brings together academia and business. Funding is based on strategic national R&I priorities of which health is one. Funding is on a competitive basis.
- 02. European Social Fund (ESF) funding instrument: The ESF financing instrument is applicable for the non-technology based research of the project: doctor, care, relative, and patient interaction, ethics, data protection and privacy. There are two issues. First, the local ESF Managing Authority prefers to finance large ESF projects that exceed €750,000, given the high overhead administrative application costs. The second is the timing of when an ESF call for the applicable Priority Axis is issued, which may not necessarily be at the time when the implementation of the Action Plan is planned.
- 03. European Innovation Partnership (EIP) on Active and Healthy Ageing (AHA): In 2012, AGE launched the Campaign "Towards an Age-Friendly EU by 2020," intending to shape a fair and sustainable society for all ages. The EIP AHA aims to promote healthy and active ageing. Furthermore, the MGOZ INTENCIVE team is aware that following the EC's Green Paper on Ageing launch, the EIP AHA aligns its objectives closely with the life-course approach focusing more concretely on scaling up and deployment of digital tools for smart, healthy and age-friendly environments.
- 04. The Active and Assisted Living (AAL) Fund: The AAL financing programme, which is co-financed by the EC through the Horizon programme, funds projects addressing issues such as management of chronic conditions, social inclusion, access to online services, mobility, management of daily activities, and support from informal carers.

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07. References

Abdi, J.; Al-Hindawi, A.; Ng, T.; Vizcaychipi, M.P. Scoping review on the use of socially assistive robot technology in elderly care. BMJ Open 2018, 8, 20.

Bechade, L., Dubuisson-Duplessis, G., Pittaro, G., Garcia, M., & Devillers, L. 2019. Towards Metrics of Evaluation of Pepper Robot as a Social Companion for the Elderly: 8th International Workshop on Spoken Dialog Systems. 10.1007/978-3-319-92108-2 11.

Bennechere, B., & Shakian, J., B., Can Mobile Technology Help Prevent the Burden of Dementia in Low- and Mid-Income Countries?, Front. Public Health 8:554938, 2020.

Bonner, S., & Idris, T., Assistive Technology as a Means of Supporting People with Dementia: A Review, Housing Learning & Improvement Network, 2012.

Chen, S.-C.; Jones, C.; Moyle, W. Social robots for depression in older adults: A systematic review. J. Nurs. Scholarsh. 2018, 50, 612–622.

Dahl, S., T., and Boulous, K., N., Robots in Health and Social Care: A Complementary Technology to Home Care and Telehealthcare? robotics, 2013, 3, 1-21.

Dominey, P.F., Paleologue, V., Pandey, A.K., & Ventre-Dominey, J. 2017. Improving the quality of life with a narrative companion. 26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), 127-134.

European Commission, Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions on the impact of demographic change, COM(2020) 241 Final, Brussels, 17.6.2020.

European Commission, Green Paper on Ageing titled 'Fostering solidarity and responsibility between generations', COM(2021) 50 Final, Brussels, 27.1.2021.

Feingold-Polak, R., Elishay, A., Shahar, Y., Stein, M., Edan, Y. & Levy-Tzedek, S. 2018. Differences between young and old users when interacting with a humanoid robot: A qualitative usability study. Paladyn, Journal of Behavioral Robotics. 9. 183-192. 10.1515.

Flandorfer, P. Population Ageing and Socially Assistive Robots for Elderly Persons: The Importance of Sociodemographic Factors for User Acceptance. Int. J. Popul. Res. 2012, 2012, 1–13.

Formosa, M., (2015). Ageing in Malta: Issues, Policies and Future Trends, International Institute on Aging, Malta.

Formosa, M., (ed, 2018). Active and healthy ageing in Malta, Department of Gerontology, Faculty for Social Wellbeing, University of Malta.

Formosa, M., et al., National Strategy for Active Ageing: 2014-2020, Parliamentary Secretariat for Rights of Persons with Disability and Active Aging, 2014.

Gagnon, M., et al Suitable e-Health Solutions for Older Adults with Dementia or Mild Cognitive Impairment: Perceptions of Health and Social Care Providers in Quebec City, In Proceedings of the 6th International Conference on Information and Communication Technologies for Ageing Well and e-Health (ICT4AWE 2020), pages 172-175, 2020.

Gathercole, B., et al, Assistive technology and telecare to maintain independent living at home for people with dementia, March 2021 Health technology assessment (Winchester, England) 25(19):1-156.

INnovation and Technology ENhancing Customer Orlented Health SerVicEs





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Gibson, G., et al, The everyday use of assistive technology by people with dementia and their family carers: a qualitative study, BMC Geriatrics, 2015.

Howard, R., et al, The effectiveness and cost-effectiveness of assistive technology and telecare for independent living in dementia: a randomised controlled trial, January 2021 Age and Ageing 50(3).

Hung, L., Liu, C., et al The benefits of and barriers to using a social robot PARO in care settings: a scoping review, BMC Geriatrics, (2019) 19:232.

Lappeenranta, L, & Kyrki, V, Robotics in Care Services: A Finnish Roadmap, ROSE Consortium, 2017.

Latikka, R. et al, Older Adults' Loneliness, Social Isolation, and Physical Information and Communication Technology in the Era of Ambient Assisted Living: A Systematic Literature Review, Journal of Medical Internet Research, 2021;23(12):e28022.

Jøranson N, Pedersen I, Rokstad AMM, Aamodt G, Olsen C, Ihlebæk C, et al. Group activity with Paro in nursing homes: systematic investigation of behaviors in participants. Int Psychogeriatrics C Int Psychogeriatr Assoc. 2016;28:1345–54.

Niemelä, M., Määttä, H., & Ylikauppila, M. (2016). Expectations and experiences of adopting robots in elderly care in Finland: perspectives of caregivers and decision-makers. In Proceedings of the 4th International Conference on Serviceology, ICServ2016 Society for Serviciology.

Mervin MC, Moyle W, Jones C, Murfield J, Draper B, Beattie E, et al. The cost-effectiveness of using PARO, a therapeutic robotic seal, to reduce agitation and medication use in dementia: findings from a cluster-randomised controlled trial. J Am Med Dir Assoc. 2018;19:619-22.

Moyle W, Bramble M, Jones C, Murfield J. Care staff perceptions of a social robot called Paro and a look-alike plush toy: a descriptive qualitative approach. Aging Ment Health. 2018.

Nihof, N., eHealth for people with dementia in home based and residential care, Dissertation, University of Twente, 2013.

Pandey, A. & Gelin, R. 2018. "A mass-produced sociable humanoid robot: Pepper: The first machine of its kind", IEEE Robotics Automation Magazine, pp. 2-10, September 2018.

Poberznik, A., and Merampi, S., (2019). Older adults' experiences with Pepper humanoid robot, Satakunta University of Applied Sciences, Finland).

Piezzo, C. & Suzuki, K. 2017. Feasibility Study of a Socially Assistive Humanoid Robot for Guiding Elderly Individuals during Walking. Future Internet. 9. 30.

Rantanen, T., Leppalahti, T., et al, Impacts of a Care Robotics Project on Finnish Home Care Workers' Attitudes towards Robots, International Journal of Environmental Research and Public Health, 2020, 17, 7176.

Robinson, H.; MacDonald, B.; Broadbent, E. The Role of Healthcare Robots for Older People at Home: A Review. Int. J. Soc. Robot. 2014, 6, 575–591.

Sriram, V., et al, Carers' experience of using assistive technology for dementia care at home: a qualitative study, BMJ Open, Volum 10, Issue 3, 2020.

Spiteri Gingell, D., et al., Strategy for Improving the Management and Admission and Discharge of the Elderly from the General Acute Hospitals, Ministry for Health (2010).

Stapleton, P., & Delaney, S., Implementing Assistive Technology in Dementia Care Services, Work Research Centre, 2015, Commissioned by Genio.

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Takayanagi K, Kirita T, Shibata T. Comparison of verbal and emotional responses of elderly people with mild/moderate dementia and those with severe dementia in responses to seal robot, PARO. Front Aging Neurosci.,2014;6:257.

Vella, S., Residential care for older adults, chapter in Formosa, M., (ed, 2018). Active and healthy ageing in Malta, Department of Gerontology, Faculty for Social Wellbeing, University of Malta.

Vermeer, Y., et al, Surveillance Technology in dementia care: implicit assumptions and unresolved tensions, Interdisciplinary Network for Dementia Using Current Technology, 2018.

Zamiri, M.; Sarraipa, J.; Ferreira, F.L.; Manus, G.M.; O'Brien, P.; Camarinha-Matos, L.M.; Jardim-Goncalves, R. Review of Technology-Supported Multimodal Solutions for People with Dementia, Sensors, 2021.

https://www.siliconrepublic.com/machines/stevie-robot-elder-care-niamh-donnelly

https://www.verywellhealth.com/paro-the-therapeutic-robot-seal-1123855

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Correspondence with the Gozo Regional Development Authority Annex I

From: Borg Mario 4 at GRDA <mario.borg.4@grda.mt>

Sent: 05 January 2022 12:58

To: Galea Christian at MGOZ-IMU <christian.galea@gov.mt>; Attard Juergen at GRDA <juergen.attard@grda.mt

Cc: Mizzi Jonathan at MGOZ-IMU <jonathan.mizzi@gov.mt>

Subject: RE: Interreg Europe: Intencive

Many thanks Christian.

@Attard Juergen at GRDA can you please insert in draft RDS?

Mario Borg

Chief Executive Officer Gozo Regional Development Authority

Telephone: +356 22156332 Mobile: +356 99261316

Email: mario.borq.4@grda.mt Website: www.grda.mt

Address: Gozo Regional Development Authority, Innovation Hub, Xewkija Gozo, Malta



From: Galea Christian at MGOZ-IMU <christian.galea@gov.mt>



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Sent: Thursday, 23 December 2021 12:17 To: Borg Mario 4 at GRDA <mario.borg.4@grda.mt> Cc: Mizzi Jonathan at MGOZ-IMU <jonathan.mizzi@gov.mt> Subject: RE: Interreg Europe: Intencive Dear Mario Further to our meeting, please find draft text which you may consider including it in the GRDA policy: 01. Elderly Automation Services in a Residential Care Home An AI Robot can be piloted in a residential home of the elderly in Gozo. The pilot will be directed to assess (a) how elderly persons perceive interaction with the AI Robot, (b) what kind of attitudes they have related to the AI Robot, and (c) how and where they would or would not use the AI Robot as a mood uplifting companion. The pilot will cover the full process from the drafting and programming of text in Malta to emotional responses to the policy framework of how such an Al Robot may be applied beyond a test environment. Remote Monitoring of Persons Suffering with a Dementia Condition A partnership can be entered into with a Local Council in Gozo for the testing of remote monitoring of persons suffering with a dementia condition living in their home or with relatives. The assistive/ambient assistive technologies that will be used in this pilot will consist of (a) person tracking within a specified boundary; and (b) night safe living. The pilot will assess the full monitoring framework: from a 'virtual' clinic, the handling of alarms, involvement of third parties including, doctors, to data privacy and protection matters. The objectives of these action items are consistent with the following goals set for Priority 6 titled 'Social Development' of the Gozo Regional Development Strategy 2021-2030: - Strengthen Gozo's society and its communities' underlying social capital. - Address the needs of the elderly members and promote active ageing. - Ensure adequate social development infrastructure. The projects fall under initiative M6.4 titled 'Aging Support Services' of the said strategy.

The realisation of these projects from concept to implementation is dependent on the INTENCIVE Interreg Europe project and the acquisition/provision of the necessary funding.

Wish you and your loved ones a Merry Christmas filled with joy and happiness.

Thanks and regards

Christian Galea ICT Officer



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From: Borg Mario 4 at GRDA <mario.borg.4@grda.mt>

Sent: 09 December 2021 09:56

To: Galea Christian at MGOZ-IMU <christian.galea@gov.mt> Cc: Mizzi Jonathan at MGOZ-IMU <jonathan.mizzi@gov.mt>

Subject: RE: Interreg Europe: Intencive

Thanks. Can we make it Tuesday 14th after 13:00?

Mario Borg

Chief Executive Officer Gozo Regional Development Authority

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Email: mario.borg.4@grda.mt Website: www.grda.mt

Address: Gozo Regional Development Authority, Innovation Hub, Xewkija Gozo, Malta



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From: Galea Christian at MGOZ-IMU <<u>christian.galea@gov.mt</u>> Sent: Tuesday, 7 December 2021 10:09

To: Borg Mario 4 at GRDA < mario.borg.4@grda.mt >

Cc: Mizzi Jonathan at MGOZ-IMU <jonathan.mizzi@gov.mt>

Subject: Interreg Europe: Intencive

Dear Mr. Borg

Trust this email finds you well.

We (Ministry for Gozo) are partners in an Interreg Europe Project called INTENCIVE – INnovation and Technology ENhancing Customer Orlented Health SerVicEs (https://www.interregeurope.eu/intencive/).

The INTENCIVE project addresses the societal challenge of the ageing society combined with decreasing population in rural and other remote areas. There is a dire need for new, accessible and user friendly models, practices and tools for providing different types of high quality health services accessible to all citizens not depending on their age or place of living. Combining technology to the different phases of service processes with emphasis on the customer orientation means re-thinking and re-planning the health services.

The next step of this project is the drafting of an action plan for Gozo. The action plan will provide details on how the lessons learnt from the cooperation can be implemented (covering action item, implementation timeframes, players involved, costs and funding sources) in order to improve the policy instrument.

We are therefore currently collecting the necessary information and are exploring the possibility to make reference or propose actions linked to the GRDA Strategy Priority Area 6: Social Development: Address the needs of the elderly members and promote active ageing.

Are you available for a meeting next week to discuss this please?

Thanks and regards

Christian Galea ICT Officer Information Management Unit Office of the Permanent Secretary

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Repeat Session of Show Rooms for Wellbeing Technology Annex II

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Presentation of the good practice: Showrooms for wellbeing technology

24th of February 2022, 12-14 (EET)

AGENDA

- 12.00 Welcome and introduction round
- 12.30 Showrooms to demonstrate technological solutions related to health and wellbeing Seinäjoki Home of Wellbeing and SeAMK Telemedicine Center – Sami Perälä, Development Manager, Wellbeing Technology, Seinäjoki University of Applied Sciences
- 13.30 Discussion of new project idea: European networks of showrooms
 Led by Adeline Jacob, European Project Manager, Biotech Santé Bretagne
- 14.00 End of the meeting



