Brussels, Silversquare Balli, 6th November 2023

BELGIUM interest in Space Business **Applications for Healthcare and Crisis** Response

For the Conference "Space technology to enable the healthcare of tomorrow"



Motivation

 Presentation of ESA Telecom relevant R&D programmes (ARTES\BASS-BA, CSS, R3) for Healthcare thematics

 Presentation of BELSPO and BE financial contribution to the above



Space economy?

"The full range of activities and the use of resources that create and provide value and benefits to human beings in the course of exploring, understanding, managing and utilizing space.

The space economy goes well beyond the space manufacturing sector, also comprising the increasingly pervasive impacts of space-derived products, services and knowledge on economies and societies"

(OECD, 2020, p.5)



Level of resources for Belgium at CMIN22 Period 2023-2027 (e.c. 2022) at ESA (European Space Agency)

Total 2023-2027 space BE:

1243,83 M€ + 385,00 M€ = **1628,83 M**€

→ ~325 M€/y

- ESA: ~295 M€/y for Belgium including total 100 M€ from BE MoD for dual-use & peaceful purposes (new since CMIN22)
- Intergovernmental (Eumetsat, ECMWF, ESO): ~20 M€/y
- EU, Bilateral, National: ~10 M€/y



Global THEMAS for BE space strategy 2022+

- A. Space as a source for inspiration (Historical strong component science, exploration, education)
- B. Space for Earth and Society (impact on Earth policy making, safety, environment...)
- C. Space sector as business and knowledge sector (competition, support sector in BE, research and development)
- D. Strategic Autonomy (positioning Europe and BE)



BE supports <u>all 3</u> accelerators, in ESA CMIN2022 resolution, to accelerate the Use of Space in Europe, in preparation of CMIN2025



Space for a Green Future

Rapid and Resilient Crisis Response (R3)





Protection of Space Assets

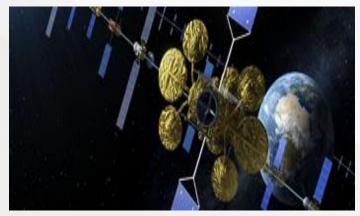


CMIN2022 BE involvement

that accelerate the Use of Space in Europe

for Crisis Response

in ESA\TELECOM programmes



ARTES 4.0 (Advance Research in Telecommunication Systems) Programme



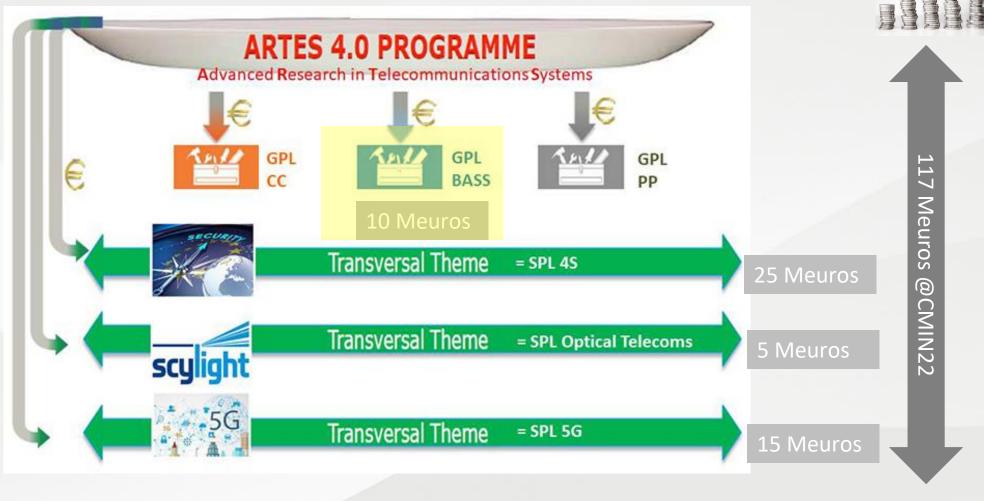
CSS (Civil Security from Space) programme





ARTES 4.0 Programme @ CMIN22





Contribution BE

belspo



- Satellite constellation + digitalization + security
- Contribution to EU Secured Connectivity Initiative, Govsatcom & EuroQCI + ESA own Telecom activities
- 5G -> 6G and Greener space & space4green joined by BE
- Optical and Quantum Communications
- Less money for ARTES but new additional TELECOM programmes!



CSS (Civil Security from Space) programme@ CMIN22



"SafePlace" by RHEA

5.977 Meuros

2.405Meuros

0 Meuros

"Smart-Connect" by GeoVille

"Cosmos" by IceEye

> others yet to come



- A new additional TELECOM programme at CMIN2022
- A Cross-Directorate programme: Telecoms-Navigation-Earth Observation
- A seed for accelerator R3
- Connecting upstream and downstream to provide services for crisis management
- Partnership-type of projects
- Not all ESA member states participate yet
- BE has the largest budget share
- Aim to showcase demonstrations to attract new ESA member states and additional budge



Contribution BE

Belgian contacts in relation to SpaceTechnology for HealthCare and Crisis Response

BELSPO (Belgian Science Policy Office), Service Spatial, DG Recherches et Applications Spatiales

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