The Future EO programme

Gordon Campbel
Head of Enterprise Section
EO Programmes Directorate
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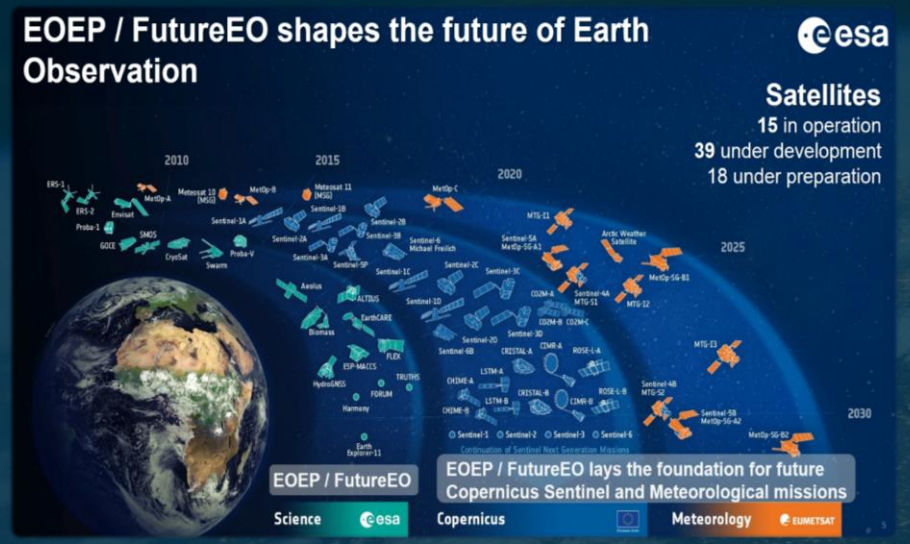
Gordon.Campbell@esa.int

FutureEO-1 Segment 2 – Key highlights



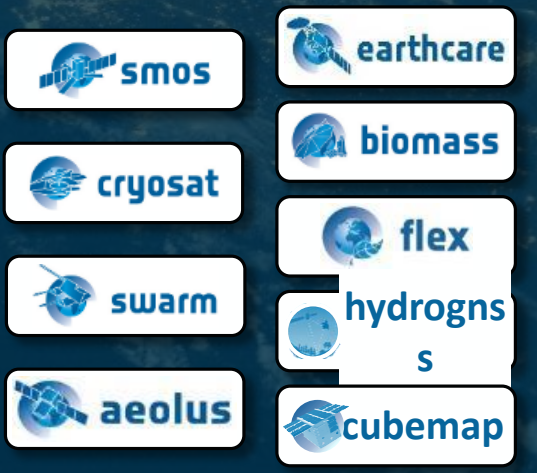
Paving the way to the future

- Combining Mission Feasibility with enabling Technology & Science and Campaigns
- Prepare the whole EO family of missions
  - The Research Missions
  - Copernicus Sentinel Next Generation missions
  - Meteosat Fourth Generation and MetOp Third Generation missions
- Further science, applications and downstream industrial competitiveness

+ Enhanced “Generic Preparation of the Future” and “Instrument Pre-development”

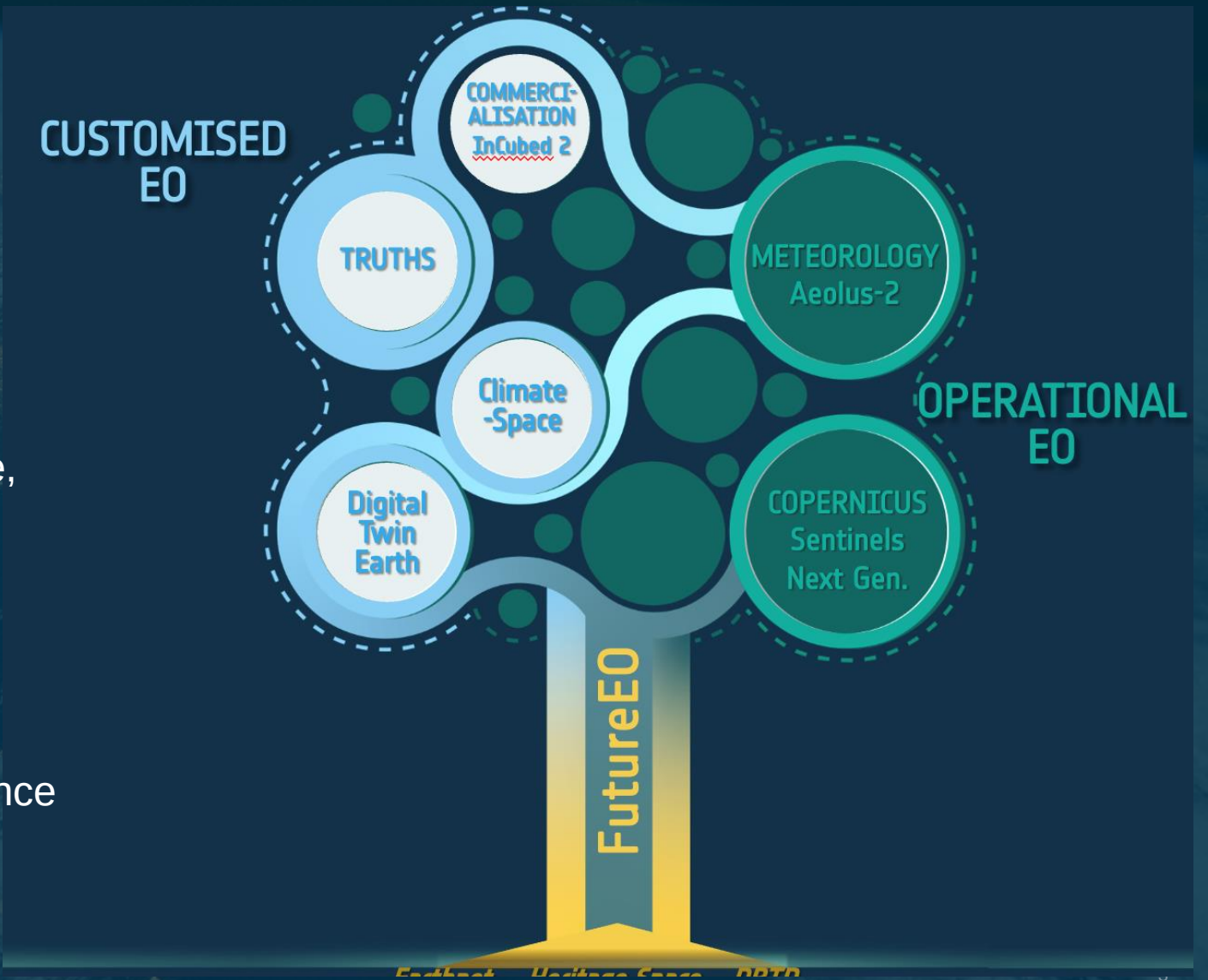
The Research Missions

- Implement BoostFutureEO early phases
- Implement Harmony as Earth Explorer 10 (pending successful UCM and PB-EO decision)
- Prepare candidate missions for Earth Explorer 11
- Issue and prepare call for EE 12 & 13 respectively
- Implement Next Generation Gravity Mission
- 2nd Scout challenge and implementation
- Operate and manage growing amount of EEs in orbit



Programmatic Structure and Context

- Future EO is core development action that generates all other EO programmes
- Structured as four blocks:
  - Block 1 - Foundations and Concepts
  - Block 2 – Research Missions
  - Block 3 - Mission Management
  - Block 4 - EO Science for Society
- Block 4 (EO Science for Society) structured as several component action lines covering science, applications, industrial competitiveness, next generation digital environments, etc
- Strong scope for cross-fertilization with other funding opportunities, eg:
  - InCubed/TIA BASS
  - Climate-Space/Global Development Assistance
  - Civil Security from Space
  - Horizon Europe



So what are we going to do in Future EO1 segment 2?

Core Elements:

- Science
- Applications
- Industrial Competitiveness
- Digital Platforms

Cross-cutting Elements

- Open Call
- Sentinels User Preparation
- Regional Initiative
- Foresight

Science priorities

Maximize the scientific impact of the Earth Explorers, the Sentinel missions and the huge synergies offered by the international EO panorama:

- Activities structured as a set of Science Clusters focused on major domains of Earth sciences
- collaborative research across teams and fostering a community approach towards common scientific goals
- collaboration with Horizon Europe through the EC-ESA Joint Earth System Science Initiative

Further enhanced collaborative research through the new *Earth System Science Hub:*

- an open science facility in ESA
- young and seniors scientist from MS and international top class researchers as visiting scientists

Open science at the core of the programme through:

- Fostering data sharing workflows and knowledge sharing though dedicated community tools (e.g.SNAP, Virtual Labs)
- Fostering wide dissemination of science results including advanced education and training

Applications priorities – response to policy drivers

Mechanisms:

- rapid applications and fast-prototyping tests over representative local areas
- large-scale deployment and scaling-up of validated algorithms in a pre-operational context

Target Policies per thematic domain:

- **Ocean**: SDG 14 "Life below water",UN Ocean Decade (2021-2030), EU Marine Strategy Framework Directive
- **Atmosphere** European Monitoring and Evaluation Programme, EMEP (EMEP) Air Pollution, CLRTAP
- **Food** : UN SDG 2 & 6, EU newCAP and FarmtoFork, G20 Agriculture.
- **Wetland** : Ramsar Convention, SDG Target 6.6 on water-related ecosystems
- **Biodiversity**: Convention on Biological Diversity (CBD), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), EU Biodiversity Strategy for 2030.
- **Ecosystems** : EU directive on ecosystem accounting, UNCCD Land Degradation Neutrality (LDN), SDG 15.3, Natura 2000, UN Decade of Ecosystem Restoration.
- **Urban**: UN Habitat III New Urban Agenda, SDG 11 on sustainable cities and communities
- Water : UN International Decade for Action on 'Water for Sustainable Development', SDG 6, EU Water Framework Directive
- **Soil and land cover** : Sustainable Development Goals, UNCCD Land Degradation Neutrality, RAMSAR Convention, EU Thematic Strategy for Soil Protection, EU newCAP, UNFCCC and IPCC, WRI, CIFOR, FAO, GEO BON, GEO GLAM
- **Forestry** : SDG 15.2 on "sustainably manage forests", UNFCCC Paris Agreement – REDD+, EU Forest Strategy, etc

Applications tenders - 1

Ecosystem Accounting. Development and testing of methods for integrating EO based methods *within the Ecosystem Accounting (EA) standards (i.e., new EU regulation on EA and UN SEEA EA) and associated technical guidelines (e.g., EUROSTAT, IUCN Global Ecosystem Typology,). Requirements expressed by stakeholders during the 2022 the EA workshop (eo4ea-2022.esa.int/) shall be explicitly addressed within proposed analysis methodologies*

Biodiversity and Ecosystem Conservation and Restoration *– this action will start four parallel contracts as follows: 1) consolidation of the Ecosystem Restoration activity with respect to the GBF Target 2;*
2) EO for Essential Biodiversity Variables and GBF indicators, in collaboration with major partners such as GEO BON, Biodiversa+, and GBIF;
3) the UN Ocean Decade challenges and Essential Ocean Variables developments,;
4) Consolidation of the World Soil activity in relation to top soil organic carbon.

Vulnerability, Adaptation and Resilience. *this activity will include procurements on:*
1) EO for and Nature-based Solutions;
2) EO-integrated support methods, tools and solutions for Carbon Markets,
3) Novel products for Urban Resilience needs
4) Consolidation of the WorldEmissions

Applications tenders - 2

Food Systems. *-this activity line will include procurements on:*

1) *the development of an adaptive agricultural decision support system for farmers and land managers, with an interdisciplinary multi-scale multi-variate analysis approach;*
2) *consolidation of the Sen4STAT activity increasing the capacity development actions; 3) the implementation of advanced analytics for yield and water-productivity information products and related tools, bringing together meteorological, irrigation, evapotranspiration and runoff modelling*

SDG Targets and Indicators *- this activity will include procurements on development of novel indicators related to agri-water productivity (SDG 2.4 & 6.4), and Mountain forest and grassland ecosystems (SDG 15.4)*

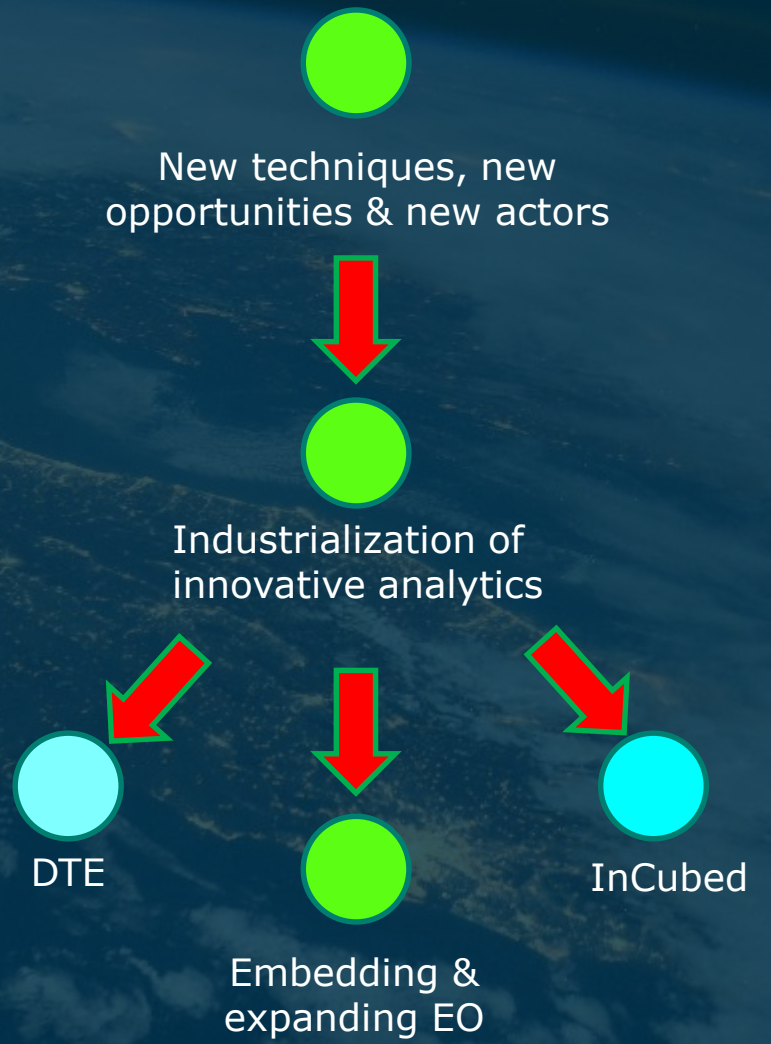
GTIF Actions *- this line will include procurements on:*

1) development of new capabilities for high-priority issues within Adaptation Policies, to boost the Green Transition Information Factories (GTIFs) potentials (e.g., Renewable Energy Subsidy Monitoring, Renewable Energy Nowcasting; Building insulation & heat emission monitoring; Information provision for bioenergy sector)
2) consolidation of the GTIFDemonstrator functionalities

Industrial Competitiveness Overview

"ESA as an Enabler"

- New techniques, new opportunities & new actors
  - New tools
  - New processing
  - New datasets (EO and non-EO)
- Industrialization of innovative analytics
  - Application oriented capability testing
  - Fitness for purpose
- Embed & Extend EO
  - Establish best practices
  - Regional service portfolios
  - Regional economic cooperation structures (blue economy, digital economy etc)



New techniques, opportunities & actors

- **IC1: New Techniques and Processing Methods** (5-6 Parallel contracts) – prototype and verify new algorithms and processing methods for already available EO datasets. This includes actual testing within 3 application examples. Priority areas to be addressed include:
  - Optical/IR video processing methods including neuromorphic processing, low contrast feature extraction, low light level enhancement, automated feature recognision, off-nadir feature recognisiton
  - VideoSAR analytics, including neuromorphic processing, integration of videoSAR and micro-Doppler based target characterization, feature characterization based on radar shadow behaviour, sub-sperture coherence characteirzation
  - SWIR based automated feature extraction
  - MIR/TIR super-resolution enhancement
  - Night-tme acquistions for persistent monitoring of localized activities (may also involve the use of glimmer data from SDGSat1)
  - Opportunity for industry defined activity lines

Industrialization of Innovative Analytics

- **Integration of EO and ABM for Decision Support –** development and verification of decision support methods based on the combination of EO derived information and ABM based process models. Examples include transport infrastructure, urban, energy & utilities management
- **Industrialization of Innovative AI methods -** development and verification of innovative new AI based EO data processing and analysis methods, including clearly defined use case based assessment against requirements specified by cooperating stakeholders. Examples include Graph-AI based methods, integration of EO and HPC Earth system process emulators, causul AI based inference methods etc
- **New methods for economic activity analysis** - Development and verification of methods to integrate EO derived information, transponder information, IoT sensor network data and telecoms network information to support enhanced characterization of economic activities, eg multi-sensor fusion for characterization of steel, cement and aluminium production activities, manufacturing activities (vehicle production, chemical production), construction activity levels etc
- **NewSpace Satellites Fitness for Purpose Verification -** specification, setting up and execution of exercises in cooperation with strategic partners to verify small satellite utility for new application and service opportunities. The target is small satellites that have innovative data collection capabilities or operating modes that can add significant value over currently available datasets. Main focus is connecting to a customer base for which the satellite operator would not have existing access

Embed and Expand EO

- **IC4 – Testing Industrial Cooperation Approaches for Export Markets** – cooperation with UNIDO
- **IC5 – Expanded Regional Service Portfolios**:
  - Atlantic region - expanded national contributions to infrastructure monitoring and expansion of new application stimulations within innovation clusters in the region
  - Baltic region - infrastructure monitoring and characterizing economic activities with a significant carbon footprint (steel production, cement production etc)
- **IC6 – EO Veracity Proof of Concept Verification** - Elaboration of priority issues to be addressed and verification of possible analysis methods to support verification of end-to-end information generation processes to generate credible, relevant and trustworthy information
- **IC7 – Embedding EO services within International Agencies** - This will target developments for entities having operational budgets available to procure new services. Focus is novel applications where EO is a relatively small element within the overall analysis to be conducted and where analysis products require extensive fusion of multiple data streams and complex /customized processing
- **IC8 – Enhanced Methods for EO and Open Source Information Fusion** - develop and test methods for using EO derived information to rapidly verify and augment information from social media, commercial media and open source public sector institutions

Permanently Open Call overview

Background

- Open call mechanism requested by Member States to accelerate Future EO capacity to address new ideas from industry/science communities

Objectives

- Rapid verification of innovative proofs of concept
- Scope covers entire activity spectrum for Future EO block 4 – ie EO exploitation

Implementation Approach

- Proposal template submitted according to regular deadlines
- TEB review against standard ITT criteria including innovation/impact WRT state of the art

Experience to date for lessons learned

- ~700 proposals received, >170 contracts started, average success rate ~ 1 in 4
- Consistently high quality of new proposals each batch means many good proposals not being selected
- Success rate for new actors basically the same as for experienced bidders
- Significant success rate for resubmitted proposals
- Rethinking of domain specific requirements (in particular user engagement)
- Need for rapid communication and debriefing with unsuccessful bidders

FutureEO segment 2 EO4 Society Open Call

Scope of new Call:

- All elements of Block 4 (science, applications, industry competitivens, digital innovation, regional initiatives, sentinel user preparation, foresight)
- Core of activity is EO data exploitation

Implementation

- New implementation approach with two types of activity possible:
  - Conventional innovative project as for previous calls
  - Smaller, more rapid actions (eg earlier levels of maturity)
- 3 Submission batches per year but possibility to select increased number of proposals per batch
- Certain batches may include priority foci per batch to complement generic block 4 scope (eg new sensor availability, response to time limited issues etc)
- Rapid communication to unsuccessful bidders and improved debriefing (but limit on number of resubmissions)

Financial aspects:

- Conventional projects – max value 200k Euro
- Rapid verification and testing – max value is 100k Euro

Open Call - Up-front considerations

Is your proposed development really a small, “quick and dirty” verification that a new methodology could work and could be the basis for significant follow-on activity (either inside or outside of ESA)?

Things that may not be in scope:

- Theoretical assessments (the scope is activities leading to short term EO data exploitation)
- Commercial demonstrations with new customers (InCubed, BASS etc may be better suited to this)
- A larger scale development where the ESA funds cover only a small part of the overall development costs (POC is for trying out new stuff that then leads to larger scale activity)
- Development of applications or science based exclusively on non satellite data
- A development where the core issues do not relate to EO data

Submitting a proposal – just complete a template

What do you want to develop & what for?

What are the technical steps to be executed?

What will the development do?

What are the target requirements to meet?

What is the innovation you propose?

What are the technical problems and what will you do about them?

Why should we do this activity?

3) SECTION 3: IMPLEMENTATION AND MANAGEMENT (3,25 pages)

3.1 Scientific/technical implementation steps (750 words)

3.2 Work Breakdown Structure ("WBS") (only for the regular innovative activities) (250 words)

3.3 Work Package Description ("WPD") (only for the regular innovative activities) (250 words per WP)

3.4 Allocation effort of the key personnel of the proposed activity (250 words)

Name Key Person	Organization	Project Role	Key expertise	Effort dedicated to the Project (Total working hours and percentage)

3.5 Gantt chart (250 words)

- *[Insert a Gantt chart schedule for the proposed activity, covering from the start of the*

Note that there is no need for a letter of support from your national delegation

Reminder – the evaluation criteria

5) Please note that the quality of your tender will be evaluated on the basis of the following evaluation criteria and associated Weighting Factors ("WFs") (that are also mirrored in esa-star Tendering):

1. Clarity of the technical objectives and definition of the requirements for the proposed work. Innovation including the scientific and societal impact of the proposed activities (i.e., novelty and originality of the approach; demonstration of direct relevance to the objectives; critical areas assessment; credibility of target impacts). **[➔ WF 40%]**

2. Background and experience related to the fields concerned of the company(ies) and the adequacy of staff and resources (i.e., adequate coverage of all development areas, rationale of the proposed team composition, involvement of project users/stakeholders, adequacy of required resources and data) **[➔ WF 20%]**

3. The adequacy of the proposed scientific or technical approach; adequacy of the management approach; adequacy of the planning **[➔ WF 30%]**

4. Compliance with the administrative tender conditions and with the financial conditions **[➔ WF 10%]**

Consequences from the evaluation criteria

These criteria are the only basis for selecting or not selecting your proposal – if your overall mark is not sufficient then your proposal is not selected.

Common myths that cannot be true:

- There is no “hidden agenda” (we can only use these criteria – we cannot include secret additional criteria that we don’t tell you about)
- There is no constraint on which entity can be prime contractor (or which entities can bid – as long as you are all registered as ESA suppliers)
- There is no constraint on the number of contracts you are “allowed” to win
- There can be no secret black list of companies or countries (although there may be a georeturn preference clause which will be stated in the cover letter)
- There is no magic/secretly correct number of partners per team
- There is no secret queueing hierarchy for submissions

Specific points to keep in mind:

- It is up to the bidder to justify choices/trade offs and demonstrate compliance/credibility with…

WHAT YOU PUT IN THE PROPOSAL!!!

Proposal scope/proposed development/tech objectives

Explain clearly and succinctly

- What you want to develop
- What are the target levels of performance to be achieved and why (reference user requirements if relevant)
- What are the technical (or other) advantages over current state of the art

Ensure the proposal contains the relevant technical information that we can review and assess

Hint/Tip – In the Permanently Open Call, concentrate on the main issues to be tested/verified/investigated. Other stuff can be done in follow-up work if the core idea is demonstrated to be successful and interesting

Typical problems on overall scope/approach

Lack of explicit technical content in the proposal

Proposal content
- we have a user
- we want to develop a prototype application

WP1
User
Requirement

WP2
Application/C
specification

capability
development

Does not enable a technical assessment of the proposal

Proposal content
- we want to develop a prototype application
- We will use a ML based processing method

WP 1
Literature Review
and identify

WP N
Impl
model

WP N+1
…

Does not enable a technical assessment of training data, validation, method etc

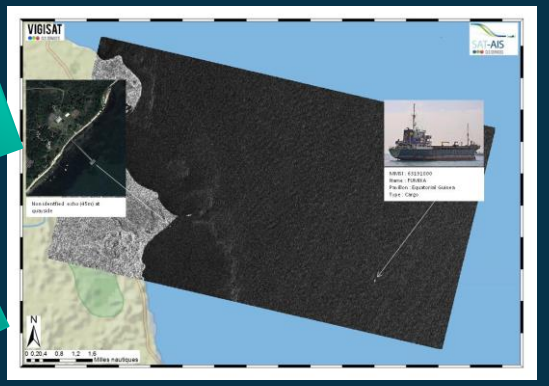
Proposal content
- we have a user with the following problems and the following requirements
- we have an initial portfolio specified and agreed with the user

WP1
User
Requirement and
Service Capability
Consolidation

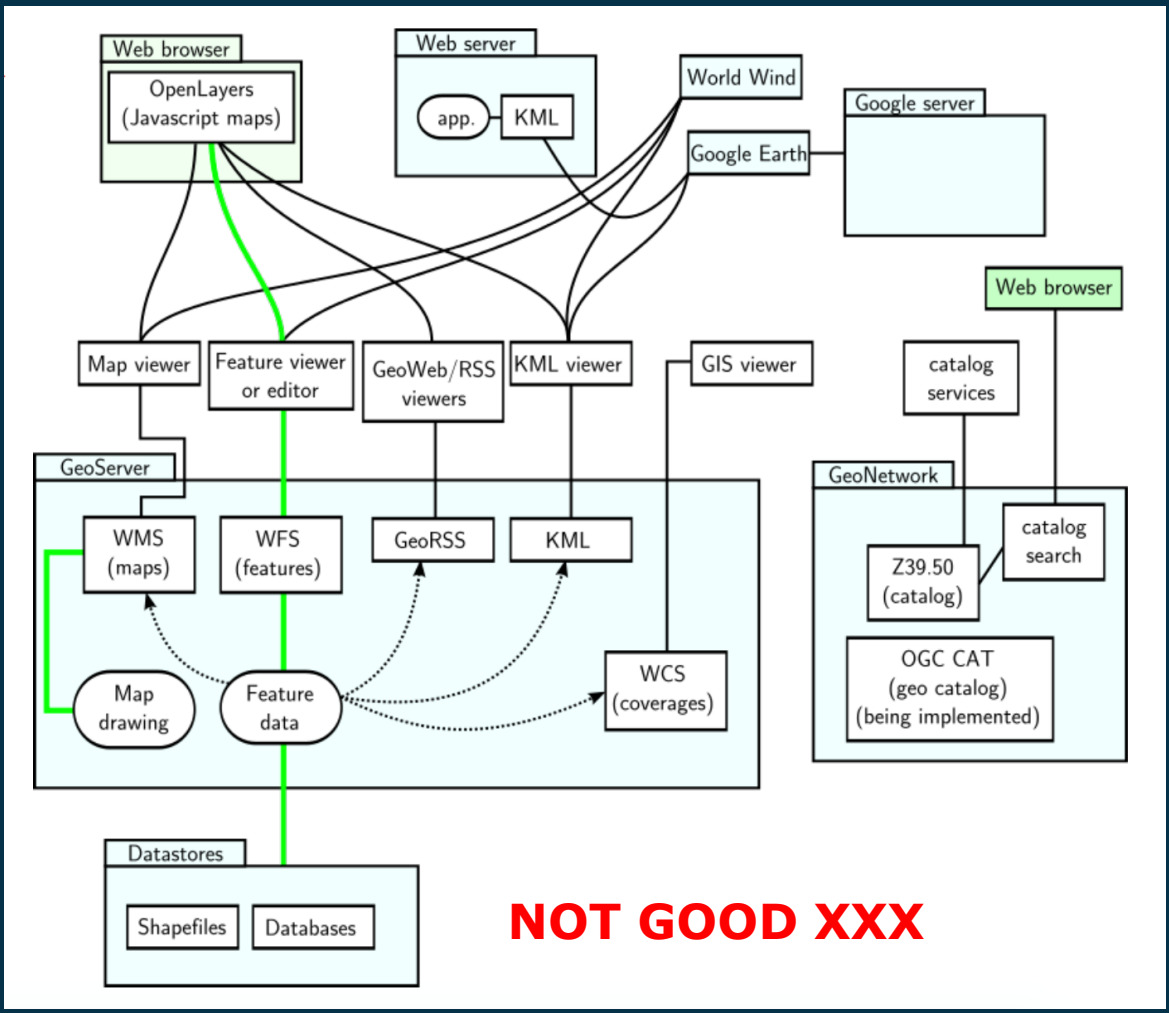
WP2
Service Capability
Development

WP N
…

Scope of the developments



GOOD ✔ ✔ ✔



Sometimes we see things like this…

Current approaches for generating the analytic products of interest rely on sparse EO data acquisitions. Our proposed development will leverage leading edge innovative AI techniques to generate customized analytical products that provide the necessary overview, insight and understanding of the underlying processes and thereby enable more effective decision making. We will work with the target users to identify a priority set of indices customized to emphasize the occurrence of situations of priority interest with associated confidence information based on the run-time status parameters generated during the operation of the analytics supply chain.

Our company has developed the WOWSI*TM* software suite to provide customized analytics tools and access to the relevant EO and non-EO datasets for the target user communities in a single integrated environment. Through the use of innovative ML training approaches, WOWSI™ can provide a range of AI generated parameters customized to the priority interest of the target stakeholders. In addition, WOWSI*TM* improves over current approaches for risk communication (eg high/medium/low) by using a customized numerical characterization (1-5) of risk which is clearly more intuitive, in particular for non-expert users

Please do not include content like this in your proposal – (it is not good)

Your proposal is evaluated by ESA technical experts **not** technology journalists/venture capitalists

Proposal Content:– problem areas

The problem areas and risks discussions are intended to cover TECHNICAL and PROGRAMMATIC problem areas and risks that may arise DURING the work and cannot be pre-emptively resolved prior to the start of work

They are an inherent aspect of the development activity you are proposing - In many cases the innovative component of your proposal may not what you are proposing to develop but the novel approach to addressing development problems that until now have been intractable

Correct identification of risks **shows you understand the work** you are proposing and separates you from bidders that do not understand the work

Discussion of risks and problems should include a mitigation plan:

- What is the potential impact and what actions will you take to minimise the risk of it becoming a reality?
- What will you do if it does become a reality?
- Provide details to show those mitigating actions are credible and feasible and to show your credibility in addressing these problem areas

Criterion 2 is “Understanding of the requirements and discussion of problem areas”

Understanding of the requirements means:

- Demonstrated innovative content and impact
- Development is consistent with the overall scope (ie EO exploitation)

Recurring issues in technical methodologies

Use of AI to generate the required information:

- AI is not magic and does not enable magic to happen or laws of physics to be ignored
- Models need training data and training
- Are you using the best model for generating the required information? If so demonstrate this in the proposal

Steps to be executed

- Do not just list the steps
- Make sure the critical activities are described to a level of detail that lets us verify that this is a credible approach

Verification and validation

- What test areas are to be used for verification and why? To what extent will they enable a sufficiently comprehensive verification
- How is the process for generating derived information to be validated? What validation data are to be used and how is their adequacy to be assessed?

Input data

- Are the datasets you plan to use fit for purpose? Why not demonstrate this to the proposal reviewers?
- Are detection/measurement reliability and update times adequate for detecting changes of interest?
- If you are using costly commercial data in the initial project, is this viable as a long term solution?

Task description examples – robbing a bank

PLAN A

Task 1 – run inside bank
Task 2 – steal money
Task 3 – run away

Not a good task description

PLAN B

Task 1: sort out change to pay bus fares
Task 2: find a bag to carry stolen money
Task 3: check timetables and identify suitable bus to use to escape from the bank
Task 4: get the no. 15 bus to bank
Task 5: enter bank
Task 6: steal money & put in bag
Task 7: run away to bus stop
Task 8: get no. 15 bus (in the other direction to T4) and go home

Still not a good task description

Do not just list the tasks
Tell us what you will do!!!

We often see content like this:

Tasks to be Executed

T1: Agree user requirements
T2: Identify Optimal DL model
T3: Train model
T4: Ingest EO data into the DataCube
T5: Verify model performance on agreed AoIs
T6: Elaborate roadmap for operationalization

Tasks to be Executed

T1: Customize WOWSI^{TM} package to address the priority targets of interest
T2: Structure selected EO datasets to support WOWSI^{TM} ingestion via WPS
T3: Customize WOWSI^{TM} to ensure all participating users have access
T4: Operate WOWSI^{TM} in sandbox mode
T5: Elaborate roadmap for operationalization

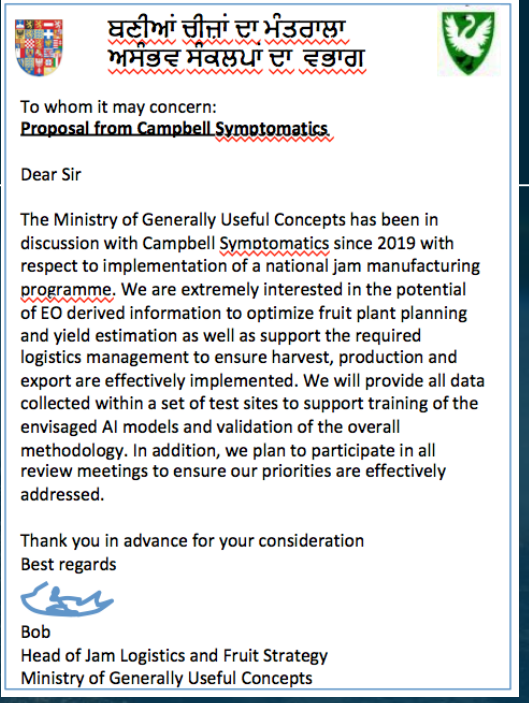
Do not just list the tasks
Tell us what you will do!!!

Reviewers comments for LH box will include:

- Requirements not sufficiently specified as a basis for selecting optimal DL model
- Availability of suitable training data is not demonstrated
- Training approach not specified in sufficient detail to demonstrate fitness for purpose
- Validation approach is not specified with respect to particular configuration of trianing data
- Verification method is not specified in sufficient detail to demonstrate fitness for purpose
- Relevance of AoIs not demonstrated with respect to critical issues to be verified

Evidence of stakeholder involvement

- Generic letters of support are better than nothing
- Stronger option - letters of support showing:
  - Stated interest in specific elements to be developed and related mandate
  - Demonstrated interest/ideas for how to use the outcomes
  - Contribution of resources (data, personnel effort, other proprietary assets)
- Proposed development and validation approach should demonstrate:
  - How is stakeholder engagement maintained?
  - How do they contribute feedback and at what points?
  - How is the feedback acted upon?
  - What happens when the project is completed



ਬਣੀਆਂ ਚੀਜ਼ਾਂ ਦਾ ਮੰਤਰਾਲਾ
ਅਸੰਭਵ ਸੰਕਲਪਾ ਦਾ ਵਭਾਗ

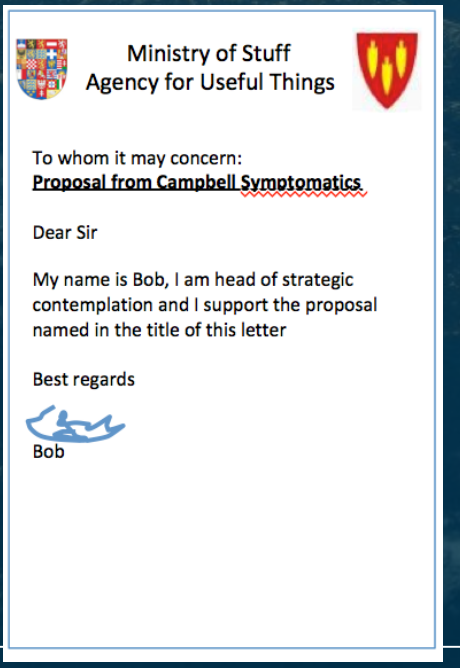
To whom it may concern:
Proposal from Campbell Symptomatics

Dear Sir

The Ministry of Generally Useful Concepts has been in discussion with Campbell Symptomatics since 2019 with respect to implementation of a national jam manufacturing programme. We are extremely interested in the potential of EO derived information to optimize fruit plant planning and yield estimation as well as support the required logistics management to ensure harvest, production and export are effectively implemented. We will provide all data collected within a set of test sites to support training of the envisaged AI models and validation of the overall methodology. In addition, we plan to participate in all review meetings to ensure our priorities are effectively addressed.

Thank you in advance for your consideration
Best regards

Bob
Head of Jam Logistics and Fruit Strategy
Ministry of Generally Useful Concepts



Ministry of Stuff
Agency for Useful Things

To whom it may concern:
Proposal from Campbell Symptomatics

Dear Sir

My name is Bob, I am head of strategic contemplation and I support the proposal named in the title of this letter

Best regards

Bob

Министерство на измислените неща
Отдел за невероятни концепции

Уважаеми господине
моля, приемете това писмо като индикация за условна подкрепа за предложението, посочено в заглавието. Нашата подкрепа зависи от промяна в правилото за офсайд за волейбол с пълен контакт и получаване на големи количества трамвайно въже от оферента

Моля, имайте предвид, че ако не изберете това предложение, ние ще отвлечем вашия мравояд и ще изпратим всичките ни свекърви да живеят при вас

благодаря ви за разглеждането на това писмо

искрено Ваш

български боб

Putting it all together

Is the bidder clear on what they want to develop?

Is the bidder clear on the proposed development will address?

Are the required performance levels to achieve these objectives clearly elaborated and credible?

To what extent is this innovative and an advance or improvement over the current state of the art?

Why is the proposed development worth doing?

Do the technical steps provide evidence that:

- the target performance levels etc can be achieved?
- the approach for addressing the inherent difficulties within the proposed development is clear and part of the work?

Does the bidder demonstrate a clear understanding of the technical difficulties to be addressed in relation to the proposed innovative development and are they proposing credible approaches for addressing them?

DETAILED PROPOSAL

EXECUTIVE SUMMARY (500 words) (only for regular innovative activities)

1) SECTION 1: DESCRIPTION OF THE PROPOSED ACTIVITY (4,5 pages)

1.1. Introduction of the activity (500 words)

1.2. Technical Objectives (250 words)

1.3. Requirements (only for the regular innovative activities) (500 words)

1.4. State of the Art (250 words)

1.5. Innovative elements within the proposed development and exploitation strategy (500 words)

1.6. Scientific/technical feasibility, problem areas and development risk (500 words)

1.7. Prospect for exploitation and further advancements (250 words)

3) SECTION 3: IMPLEMENTATION AND MANAGEMENT (3,25 pages)

3.1 Scientific/technical implementation steps (750 words)

3.2 Work Breakdown Structure ("WBS") (only for the regular innovative activities) (250 words)

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Name Key Person	Organization	Project Role	Key expertise	Effort dedicated to the Project (Total working hours and percentage)

3.5 Gantt chart (250 words)

- *[Insert a Gantt chart schedule for the proposed activity, covering from the start of the*

And Finally.....

Please make sure of the following (at least twice):

- The cover letter contains a validity period, a firm fixed price (which you state is the firm fixed price) and a signature of the relevant person in your organization. Also proposed contract duration and domain under which proposal is submitted
- Allocations to each partner and associated geographic return
- All relevant codes
- The proposal contains a firm fixed price
- All PSS forms are signed by the relevant person in each partner entity

Contractual conditions - Our job is to build industrial competitiveness (your competitiveness) and not swindle you out of IPR. Please make sure your lawyers understand this before letting them loose on objecting to contractual conditions etc.

Please remember to press the submit button on ESA-STAR otherwise we cannot access your proposal

And, for the 34 215th time…. **No you do not need to provide a letter of support from your national delegation**

Future EO and the SK RPA

Future EO opportuntiies are well matched to SK capabilities and can support development of new strategic domains of interest

Future EO and RPA are complementary – in both directions

Examples

- Initial feasibility assessments that can be taken forward in Furture EO (open calll, dedicated tenders)
- Preparatory RPA developments to strengthen SK capabilities with a view to being in bid consortia for Future EO ITTs (larger scale actions for priority domains, regional cooperation structures etc)
- National commercialization follow-on to Future EO application, service, methodology developments

RPA also offers a focussed opportunity to build up the SK agenda for participation in Future EO

The EO applications and services market is structurally different from the upstream space secrtor and this can be reflected in RPA and Future EO actions (in particular number of suppliers for a specific capability)