



STRIN Activities linked to VAE

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ESA CLIMATE CHANGE INITIATIVE

ESA DATA USER ELEMENT

ESA VALUE ADDING ELEMENT



- Activities build on previous work within VAE and EOEP exploitation elements:
 - Capabilities to deliver information services exists within STRIN countries
 - Previous preparatory activities within target market segments give strong indications of future commercial potential
 - Objective is to target growing commercial sectors and new geographic regions
- Activities are intended to foster improved links between:
 - companies from STRIN and non-STRIN countries
 - for future commercial collaboration in delivery of services
 - for further development collaboration in ESA (EOEP VAE) or EU funded activity
 - companies from STRIN countries and potential customers from non-STRIN countries

Overall summary of activities related to VAE



| ID | Activity | Implementation | Contract Duration | Price Range | Comments |
|-------|---|-------------------|-------------------|-------------|--|
| VAE 1 | New Challenges in Maritime Surveillance | Restricted Tender | 36 m | 0.900 M€ | |
| VAE 2 | Alternative Energy Market Expansion | Open Tender | 24 m | 0.750 M€ | Single Invitation to Tender with multiple Annexes Plan to start one contract in each sector |
| VAE 3 | Waste Management Market Expansion | Open Tender | 24 m | 0.750 M€ | |
| VAE 4 | Tourism Market Expansion | Open Tender | 24 m | 0.750 M€ | |
| VAE 5 | Coastal outlet monitoring | Open Tender | 18 m | 0.350M€ | |
| VAE 6 | River-bed extraction monitoring | Open Tender | 18 m | 0.250M€ | could be grouped with VAE5 |
| VAE 7 | Video image Fusion | Open Tender | 18m | 0.250M | grouped with VAE 5&6 |

- Planned timing for release of Invitations to Tenders:

- Maritime Surveillance 15 April
- Market Expansion (Tourism, Waste, Energy) 30 June
- Coastal Outlet/River Bed/video&image: 31 May

- Each ITT open for 6 weeks (Market Expansion possibly for 8 weeks)

- Target market
 - New requirements from EU Maritime Policy: Integrated Maritime Surveillance and Arctic dimension
 - National public sector institutions and commercial operators
 - Increased security requirements for maritime information
- Elements covered:
 - Improved Vessel detection & tracking (new algorithms, new modes, new sensors)
 - Detection and tracking of small targets
 - Enhanced Arctic monitoring and surveillance
 - Automatic anomaly detection
 - Addressing new modus operandi for illegal activities
- Key objectives to be achieved
 - Effectively integrate new capabilities into operational satellite vessel detection systems
 - Improve reliability for detection and tracking of small non-cooperative targets
 - Set up pre-operational Arctic monitoring and surveillance capability
 - Expand use of satellite based maritime surveillance in the wider law enforcement community
- Linked Activities:
 - MARISS (GMES Services Element)
 - Out of EU Situation Awareness (VAE)
 - ESA World Bank Support Activity (Madagascar Surveillance)
 - FP7 projects (DOLPHIN, NEREIDS)

- To be implemented as a single ITT with 3 Annexes:
 - 1 Annex per service area (Tourism, Waste Management, Alternative Energy)
 - objective is to start one contract per sector
- Funding is shared between STRIN and VAE (previously called EOMD):
 - Open competitive ITTs (not restricted only to STRIN countries)
 - How to ensure participation from STRIN countries:
 - Georeturn targets appear to be the most straightforward mechanism
 - At least 50% of the funding must go to companies from STRIN countries
 - Advantages of this approach:
 - More freedom for STRIN companies to team with other partners
 - Wider scope for building longer term partnerships for access to additional funding
- Common objectives to be achieved over each contract:
 - Agreement on standard practices for integration of EO derived information
 - Expansion of acceptance of EO derived information products in the target market
 - Routine integration with customer information systems
 - Development of revenue generation models

- Target Market
 - Large scale commercial tour/holiday village operators
 - Cruise operators
 - Regional government tourism departments
 - Media (newspapers, news operators, TV companies)
- Prototype Services Considered
 - High resolution local environmental conditions (statistics, nowcasts, forecasts)
 - Customised map products for local cultural and natural heritage incorporating WCPS capabilities
 - Sustainability assessments (water resources, emissions, pollution)
- Linked Activities
 - New Markets VAE (Tour operators, Cruise Operators)

- Target Market
 - International mining companies
 - International manufacturing companies in processes with hazardous waste products (heavy metals, carcinogenic/toxic organic compounds etc)
 - National and regional environmental protection agencies
 - Engineering and Waste Management companies
- Prototype Services Considered
 - Detection of illegal storage of waste products (tyres, chemicals, etc)
 - Detection of unlicensed or illegal dump sites
 - Monitoring of safety and environmental impact of waste sites
 - Identification of new areas for waste management
- Related Activities:
 - Out of EU Situation Awareness (VAE)
 - New Markets Contracts on Mine Waste & Waste Management (VAE)
 - EO-MINERS (FP7 DG Research)

- Target Market
 - International energy companies
 - Alternative Energy Plant Operators
 - National Government Energy and Infrastructure Departments
 - NGOs (eg WWF)
- Prototype Services Considered
 - Extraction of high resolution local environmental conditions (statistics, nowcasts, forecasts) for site selection and operations management
 - Customised cartographic information for logistics and engineering support
 - WCPS data fusion products
 - Biomass Potential Assessment
- Linked Activity:
 - ENVISOLAR
 - MACC
 - GEOLAND
 - VAE EOWIND

- Target Users
 - Water management companies
 - Coastal environment protection agencies
 - Engineering companies
- Prototype Services included
 - Coastal outflow map products (monitoring and statistical products)
 - Local forecast information products for outflow tracking
 - Coastal change information
- Key Objectives to be achieved
 - Validate capability to deliver products & services in response to specified user requirements
 - Demonstrate benefits and utility for these products & services to a group of potential customers
 - Obtain clear, credible statements on the utility of the products and services delivered
 - Compile convincing evidence on the viability of a future business case for the products & services considered
- Basic activities foreseen:
 - Agree requirements with initial participating users
 - Deliver prototype services for agreed time period
 - Assess utility and operations effectiveness
 - Analysis potential for expansion to other geographic regions
- Linked Activity
 - Completed DUE activity on coastal outlet monitoring
 - ESA activity in support of International Development Banks
 - ESA Aquaculture contract (DUE)

- Target Users River Management Commissions, National/Regional Environment Protection Agencies, Resource Management Companies
- Prototype Services considered:
 - Concession compliance (detection of extraction activities in violation of permits)
 - Site identification
 - Habitat change assessment
 - Environmental Impact Assessment
- Key objectives to be achieved
 - Validate capability to deliver products & services in response to specified user requirements
 - Demonstrate benefits and utility for these products & services to a group of potential customers
 - Obtain clear, credible statements on the utility of the products and services delivered
 - Compile convincing evidence on the viability of a future business case for the products & services considered
- Target regions
 - Major international river systems
- Basic activities foreseen:
 - Agree requirements with initial participating users
 - Deliver prototype services for agreed time period
 - Assess utility and operations effectiveness
 - Analysis potential for expansion to other geographic regions

- Target Users Operational Agencies in Security & Law enforcement
 Commercial operators in Tourism, Media etc
- Prototype Services considered:
 - Enhanced timely situation awareness
 - Enhanced anomaly detection/monitoring/tracking
 - Improved user interface for training
- Key objectives to be achieved
 - Validate capability to deliver products & services in response to specified user requirements
 - Demonstrate benefits and utility for these products & services to a group of potential customers
 - Obtain clear, credible statements on the utility of the products and services delivered
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