

Exploitable Results by Third Parties

09036 RECONSURVE

Project details

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| Name: Maritime Surveillance System | | |
|--|--|--------------------------------|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ AIS data ▪ EO/IR data ▪ Radar data ▪ Sonar data ▪ UAV images | <ul style="list-style-type: none"> ▪ GIS based display of maritime tactical picture ▪ Vessel classification/tracking ▪ Suspicious vessel identification ▪ Alarm generation ▪ Seamless integration with other surveillance systems | Maritime situational awareness |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Semantic interoperability ▪ Situational awareness ▪ UAV integration and small vessel classification ▪ Cost effectiveness | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Linux based ▪ DDS middleware ▪ Sensors (if not already supported) needs to be integrated | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Coast Guards | |
| Provider: | <ul style="list-style-type: none"> ▪ ASELSAN | |
| Contact point: | <ul style="list-style-type: none"> ▪ Dr. Cengiz Erbaş – cerbas@aselsan.com.tr | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Licensing | |
| <i>Latest update: 25 May 2015</i> | | |

| Name: EO/IR based Vessel Classification System | | |
|--|---|-------------|
| Input(s): | Main feature(s) | Output(s): |
| EO/IR images | Ability to classify vessels from EO/IR images | Vessel type |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Ship category recognition ▪ Fast recognition and offline learning capability ▪ Fusion of metric and appearance based features ▪ Man in the loop compatible operation ▪ Ability to add new categories in operation | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Requires a dataset collection effort to adapt to different environments | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Industry (developing maritime surveillance systems/products) ▪ End Users (Coast Guards) | |
| Provider: | <ul style="list-style-type: none"> ▪ ASELSAN | |
| Contact point: | <ul style="list-style-type: none"> ▪ Dr. Cengiz Erbaş – cerbas@aselsan.com.tr | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Licensing | |
| <i>Latest update: 25 May 2015</i> | | |

| Name: HYPERION | | |
|--|--|--|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ AIS detections ▪ Maritime surveillance RADAR detections | <ul style="list-style-type: none"> ▪ Ship abnormal behavior detection and tracking ▪ Tabletop HMI for the management of abnormal behavior detection rules | <ul style="list-style-type: none"> ▪ Alerts ▪ Decision support |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Detection of ship abnormal or suspect behavior ▪ Mix of unsupervised detection based on statistical analysis and predefined rules and detection supervised by an operator ▪ User-friendly and innovative HMI (tabletop) for situation management, detection rules management and visualization of alerts | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Linux or Microsoft Windows (7 or above) ▪ Drools BRMS ▪ Java (7 or above) | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Maritime and/or coastal surveillance ground centers | |
| Provider: | <ul style="list-style-type: none"> ▪ ATOL (Ecole Navale, Télécom Bretagne, Thales Systèmes Aéroportés) | |
| Contact point: | <ul style="list-style-type: none"> ▪ Olivier Grisvard - olivier.grisvard@fr.thalesgroup.com | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Commercial product ▪ To be available in 2016 | |
| <i>Latest update: 26 May 2015</i> | | |

| Name: Generic Ground Station | | |
|--|---|--|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ HD videos streams (with meta-data) from (manned or unmanned) maritime surveillance aircraft ▪ Internal and external other sensors (radar, AIS, IFF, ...) ▪ results | <ul style="list-style-type: none"> ▪ Enrich in real time the images/videos with intelligence, to extract and diffuse more out of the image, in order to provide the right information, in the right comprehensible format and timing, to the right user <ul style="list-style-type: none"> ○ Manage tracks coming from different sources ○ Detect and classify objects, ○ Generate warnings ○ Include support information inside HD video (reality augmented) and cartography | <ul style="list-style-type: none"> ▪ Data and information for C4I centers |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Real time and multi-sources data fusion ▪ Target automatic detection and classification ▪ Situation awareness improvement ▪ Generate real time warnings | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Compliance with ICDs, defining: <ul style="list-style-type: none"> ○ Interfaces with sensors chains (STANAGS, ...) ○ Interfaces with C4I (STANAGs compliant, web services use, ...) | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ System integrators for video-surveillance applications ▪ end-users : navy, coastguards, customs, but also army and air force: all end-users using RPAS or surveillance aircrafts | |
| Provider: | <ul style="list-style-type: none"> ▪ Airbus Defence&Space, 1, boulevard Jean Moulin - ZAC de la Clef St Pierre, CS40001, 78996 ELANCOURT cedex | |
| Contact point: | <ul style="list-style-type: none"> ▪ M. Hugues Foare, Airbus Defence&Space, hugues.foare@airbus.com, +33 1 6138-6543 | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ The re-use may be subject to license costs and royalties, negotiable depending commercial or research partnerships | |

Latest update: 04 June 2015

| Name: Boat detection software from embedded mobile camera | | |
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| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> Images of a video camera (visible or thermal) | <ul style="list-style-type: none"> Detects boats, locates them in image, Super-resolves boat images | <ul style="list-style-type: none"> Detection data Image super-resolved |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> Commercial product – price unit per camera | |
| Integration constraint(s): | <ul style="list-style-type: none"> Embedded on a computer Intel core i3 or ARM 15 minimum Running under Linux UBUNTU | |
| Intended user(s): | <ul style="list-style-type: none"> UAV integrators, aircraft system equipment suppliers and integrators | |
| Provider: | <ul style="list-style-type: none"> EVITECH SAS, 3 rue BUFFON, F-91400 France – 08 20 20 08 39 | |
| Contact point: | <ul style="list-style-type: none"> Dr. Pierre BERNAS - pbernas@e-vitech.com | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> Single cost license | |
| <i>Latest update: 25 May 2015</i> | | |

| Name: Collision Analysis System | | |
|---|---|---|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ AIS packets ▪ Area model | <ul style="list-style-type: none"> ▪ Risk analysis and identification of ship collision within a specific area/range ▪ Transmission of 3 type of alert messages through analysis of navigation factors (CPA/TCPA, TSS, etc) ▪ Sub-system based on CPA/TCPA and fuzzy algorithm to predict ship's collision | <ul style="list-style-type: none"> ▪ Degree of risk ▪ Safety analysis |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Unique implementation of Fuzzy-based safety assessment ▪ | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Microsoft Windows 7, Server 2008, 2012 ▪ | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Software vendors that provide decision supporting function for the maritime safety industry | |
| Provider: | <ul style="list-style-type: none"> ▪ Global Navigation Communication | |
| Contact point: | <ul style="list-style-type: none"> ▪ Hong JungHum - jhhong@jitelglobal.com | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Commercial license | |
| <i>Latest update: 26 May 2015</i> | | |

| Name: S-57+Sat Map Server | | |
|---|---|--|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ 000 file ▪ Satellite map image | <ul style="list-style-type: none"> ▪ Electronic navigational chart based on S-57 international standard ▪ overlay 1m resolution satellite image | <ul style="list-style-type: none"> ▪ ENC ▪ ENC + Satellite image |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Unique implementation of ENC server overlaying the high resolution of satellite image | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Microsoft Server 2008, 2012 ▪ SW requirements <ul style="list-style-type: none"> - Tomcat 7 ▪ HW requirements <ul style="list-style-type: none"> - Storage : 1TB - RAM : 4GB | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Software vendors that provide the vessel monitoring system based on ENC | |
| Provider: | <ul style="list-style-type: none"> ▪ Global Navigation Communication | |
| Contact point: | <ul style="list-style-type: none"> ▪ Hong JungHum - jhhong@jitelglobal.com | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Commercial license | |
| <i>Latest update: 26 May 2015</i> | | |

| Name: EyeMap-VMS | | |
|--|--|--|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ AIS packets ▪ Area model ▪ 000 files | <ul style="list-style-type: none"> ▪ Real-time display of marine and land Integrated location information based on GIS ▪ Vessel information inquiry: static and dynamic ▪ Detailed information of each vessel | <ul style="list-style-type: none"> ▪ VMS model ▪ Safety analysis ▪ Port scheduling model ▪ Traffic model ▪ Accident model |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Support decision of mariners with variant information | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ Microsoft Windows 7 (64-bit) ▪ TCP/IP based communication ▪ HW requirements - Storage : 500GB - RAM : 8GB - Screen resolution: 1920 x 1080, 65536 colors. | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ VTS(Vessel Traffic Services) operators ▪ Mariners | |
| Provider: | <ul style="list-style-type: none"> ▪ Global Navigation Communication | |
| Contact point: | <ul style="list-style-type: none"> ▪ Hong JungHum - jhhong@jitelglobal.com | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Commercial license | |

Latest update: 26 May 2015

| Name: Suspicious Vessel Behaviour Detector | | |
|---|---|--|
| Input(s): | Main feature(s) | Output(s): |
| <ul style="list-style-type: none"> ▪ AIS data ▪ Vessel Master Information | <ul style="list-style-type: none"> ▪ Suspicious vessel identification | Decision on whether the Vessel is suspicious |
| Unique Selling Proposition(s): | <ul style="list-style-type: none"> ▪ Situational awareness | |
| Integration constraint(s): | <ul style="list-style-type: none"> ▪ There are no integration constraint as the tool is based on Java Programming Language | |
| Intended user(s): | <ul style="list-style-type: none"> ▪ Coast Guards | |
| Provider: | <ul style="list-style-type: none"> ▪ SRDC | |
| Contact point: | <ul style="list-style-type: none"> ▪ Dr. Yildiray Kabak – yildiray@srdc.com.tr | |
| Condition(s) for reuse: | <ul style="list-style-type: none"> ▪ Licensing | |
| <i>Latest update: 26 May 2015</i> | | |