



Models of cooperative projects the Swedish industry perspective

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LONG TERM VISION OF BRAZIL-SWEDEN COOPERATION

Future Fighter Capability



Re-use what is available - e.g. NFFP6









SWEDISH AERONAUTICS R&T PROGRAMS



NFFP = National Aeronautical Research Program

INITIAL COOPERATION CONCEPTS



INITIAL COOPERATION CONCEPTS



EXAMPLE OF A SWEDISH PROJECT BASED STRUCTURE: NFFP 6



INITIAL TEMPLATES (IN DRAFT)

CLASSROATION. IN STRICT CONFIDENCE

Memorandum of Understanding

£ад.

Cooperation Project XX

between.

Institute Tecnológice de Acroniutica, (portineire effentel, to ar "ITA") with its expiratent effect at, Prace, Marchal Educatio Genera 50, Vila das Acticias São José dos Campos - São Paulo, 12.228-000, Bernil

end.

SAAB AB (publ).

(hereinafter referred to as "SAAB") with its registered office in, Linköping

or collectively as "Party" or collectively as "Parties".

end.

Similar for additional parties, as needed

Preamble

WHER	EAS	ITA in:	
	and the set		

WHEREAS SAAB is a leading supplier of defense systems and services, including multi-role fighters, and other security systems and services;

WHEREAS both Sweden and Brazil hold strong positions in the Aeronautics Industry and the parties acre opportunities to extend bularal Research, and Technological cooperation in the Aeronautics field;

WHEREAS the Parties hereby want to evaluate potential activities for Cooperation.

Now, therefore, the Parties hereto agree as follows;

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Statement of Work

Project XX

imum 1/2 page

ment is likely valid for most of the projects in batch 1)

f sfirst batch of projects resulting from the 1" and 3⁻⁴, 899;ijag, Swedish sultics and 800pppp in November 2014 and May 2015. This is a Triple Holix) & Sessilian Universities/Institutes + Industry + Government/Swedish Armed

to start the cooperation as acon as possible, the project is partly based on a or current activities in Sweden and/or Basel and partly en new funding that is within the project's duration. Therefore the project is a combination of grand new recarsh being dura in eccession.

adeur. Includie die Alexandere ander Bernetendeur. Ser Die anders son. Lie die 2011

e project The parties involved and input from other projects (if applicable)

industry and academia in both countries

i results of the project

"brakáowa into Wark Rackasov, avorali timo achoduje and main deliverables,

first batch of projects, since funding will be separate for each country and is likely iject(s). Each Party hereto shall be responsible for its own respective costs lived in its efforts to execute the project. No joint follow up of costs will be it required by each funding agency involved.

SCLOSURE AGREEMENT

OJECT XX

'Agreement'') has been made by and between:

h its business area Acronautics, a company lim-Sweden under company registration number office at Beildema Upplas gata, SE-581 88 Lin-

or university incorporated in [jurisdiction] under [number], with address [address];

or university in corporated in [jurisdiction] under [number], with address [address];

or university incorporated in [jurisdiction] under [number], with address [address];

or university incorporated in [jurisdiction] under [number], with address [address];

ber of parties

Parties")

erforming, exploring and exchanging results gieal projects and evaluate the persivility to cond Technological Appipgt, (the "Purgner"). In arties may exchange information of a propriotage ture, and the Parties are willing to undertake to likelosure of such information on the turns and

n to a Party, a company or other entity which: (a) Encody, by such Party, (b) controls, directly or is under common control with such Party; entrolled", "controls" and "is under common concia an efforting to control of more than 50% of the wearables.

mean this Agreement and the Parties discussion on (regardless of form) disclosed by the Disclosang Party to the Receiving Party, provided that. (i) such information, if dis-

COUPLING OF 9 EXISTING SWEDISH NFFP6 PROJECTS TO 5+ BRAZILIAN PROJECTS, 2015-2017

Brazil

Coupling

Off-the-shelf Solutions for Automated Composite Manufacturing Kerstin Johansen/Andreas Bjornsson LiU, Sergio Frascino Muller de Almeida ITA

Logistics and Maintenance Engineering Lab **Diego Galar Luleå, Fernando Abrahão ITA**

Maintenance Planning Methodologies for Military Aircraft **Fernando Abrahão ITA**

Laminar flow design and surface quality requirements (LaFloDeS) Ardeshir Hanifi KTH, Marcello Medeiros USP

System safety and reliability in the conceptual design phase Johan Ölvander LiU, Acires Dias UFSC

Techniques of security and software engineering for development of aeronautics embedded systems **Celso Hirata ITA**

Techniques for software development of aeronautics embedded systems **Simin Nadjm Tehrani LiU, Celso Hirata ITA**

Dynamic adaptive real-time embedded systems and accelerated test **Osamu Saotome ITA**

Verification of Fault-Tolerant Embedded Systems with Reconfigurable SelfHealing Hardware using a Correctby-Construction Design Flow **Gilmar Beserra UnB**

Structuring a cooperation in three research and innovation project proposals **Erika Fernandes Cota UFRGS**

Sweden

- 2013-01194 Automation in composites LiU 2013-01196 Efficient Performance Based Air Vehicle Maintenance Luleå
- 2014-00928 Context-aware Decision Support for Operative Aircraft Maintenance Luleå
- 2013-01209 Methods for increased accuracy in unsteady aerodynamics (MIAU) LiU, CTH
- 2014-00933 Investigation and modeling of time variable aerodynamic effects on aircraft controllability, UMTAPS KTH
- 2013-01223 Optimization of system safety in the concept phase balancing cost and reliability LiU 2013-01203 Hardware and Software Dependencies in Multi-Core Avionic Systems LiU
- 2014-00917 Early analysis of performance for future avionics platform LiU

2013-01215 PILOT - Platform-Independent Level of Testing LiU

FOCUS IN WORKSHOP 2

- Start to create projects out of the CISB travel grant results and "re-use" of NFFP6 projects
 - Identify partners and points of contact
 - Secure funding where necessary
 - Draft a Statement of Work that can be used in a project MoU
- Generate new project ideas for Controls and Autonomy area



WORKSHOP 3 AND BEYOND



FUTURE COOPERATION CONCEPTS



