



**SUBJECT: SENIOR EXECUTIVE MISSION FRANCE
18-24 MARCH 2017**

**FROM: PROFESSOR MONIQUE SKIDMORE, DEPUTY VICE-
CHANCELLOR, GLOBAL**

DATE: 26 FEBRUARY 2017

PURPOSE OF MISSION:

- To sign a memorandum of understanding with a consortium of four of France's leading graduate schools of Engineering (GEMA), positioning the AMC strategically within Australia's maritime defence capabilities.
- To explore opportunities for connected agriculture in the Champagne-Ardennes region.

The Vice-Chancellor has extended invitations to all Tasmanian Senators.

BACKGROUND

Two key opportunities in France were identified and developed during the Vice-Chancellor's February mission to Europe. The partnership with the GEMA is currently the highest priority, however, the visit offers the opportunity to explore collaboration in the Champagne Ardenne region in agricultural extension.

Memorandum of Understanding with GEMA Consortium

In 2016 the Federal Government announced that the next fleet of Australian submarines would be built in South Australia and appointed DCNS as the design partner.

DCNS is an advanced technology company, the European leader in naval defence and designs and builds sub-marines and surface combatants and develops associated systems and infrastructure as well as support services to naval bases and shipyards.

France is a leader in advanced technology research and development associated with defence industries. The four French parties to the MOU are leading French engineering institutions with expertise in advanced defence and maritime technologies and partner with DCNS in research and development:

- **ENSTA ParisTech** is a French “Grande École” (Graduate School of Engineering) under the supervision of the Ministry of Defence;
- **Centrale Nantes** is a French “Grande Ecole” has developed strength in the field of oceanic and naval engineering based in particular on experimental equipment unique in Europe;
- **CentraleSupélec** is a top French public Institute of Science and Technology, resulting from the merger of the Ecole Centrale Paris and Supélec, it is a founding Member of University Paris-Saclay and leads the Ecole Centrale Group.
- **École Polytechnique** is the leading French institute which combines top-level research, academics, and innovation at the cutting-edge of science and technology. It has 22 laboratories, 21 of which are joint research units with the French National Center for Scientific Research (CNRS). École Polytechnique is also a founding member of Université Paris-Saclay.

The MOU, to be witnessed by DCNS and a Tasmanian State Government Minister, provides a framework for academic research and cooperation in the disciplines of subsea engineering, submarines, hydraulics, hydrodynamics and wave energy, linked to industry.

Flinders University has entered into a similar agreement with the consortium and will leverage research, research training and technical expertise for the Future Submarine program. The University of South Australia will arrive in Nantes to sign their part of the agreement on March 29 and ECN have asked if it is possible for UTas to sign our agreement before that. UniSA is taking a large contingent but there is no maritime expertise among the academics going to France.

The partnership with French institutions is crucial to Tasmania’s ongoing and undisputed global leadership of maritime research and training, and continues the mission of the Australian Maritime College (AMC) as established by the Federal Government as the national centre for maritime defence related research, development and training. There is an opportunity to ensure that the joint programs initiated by UTas are central to the Future Submarine Program as the other Australian universities in the consortium are unable to provide this leadership.

It is intended that the visit to Nantes in March will bring together key professorial staff from AMC with the four GEMA partners and potentially researchers from Brest with whom the AMC have a longstanding partnership. AMC delegates are being finalised, but the delegation would include Professor Neil Bose and Assoc Professor Jonathan Binns. ECN are seeking to establish our interest in the pursuit of a joint research centre in Nantes between the French engineering consortium and the University of Tasmania in these areas.

The University would pursue a parallel partnership with Centrale Nantes to establish joint masters courses. Currently, there are a number of relevant 2 year courses taught in English in areas relevant and complementary to the University’s offerings:

- Master of Engineering in Hydrodynamics and Ocean Engineering
- Master of Engineering in Computational Mechanics
- Master of Engineering in Design of Systems and Products
- Master of Engineering in Energetics and Propulsion
- Master of Engineering in Materials, Processes and Technology of Composites
- Master of Civil Engineering
- Master of Engineering in Automatic Control, Signal and Image
- Master of Engineering in Advanced Robotics

- Master Amasone Atlantic Master on Ship Operation and Naval Engineering (Marine and Ocean Engineering).

Students undertaking the degrees will be funded by DCNS and it is envisaged one year will be undertaken in Nantes, the other in Launceston.

Champagne Ardennes

Following on from the meetings between UTas and GEMA academics and the signing of the consortium MOU, the delegation will travel to the Champagne-Ardennes region. The purpose of this short visit is to respond to an invitation to consider opportunities for research collaboration in “connected agriculture,” primarily through Sense-T. The Director of Research in Sense-T, Dr. Stephen Cahoon, has been invited and the State Government Minister, if confirmed, will also travel to the region where the Lord Mayor of Chalons has offered to host discussions and will be accompanied by the Governor of the region.