



DATE

COLLABORATIVE INNOVATION BETWEEN CANADA AND THE USA

PRÉSENTÉ PAR | PRESENTED BY

Partenaire financier
Funding partner

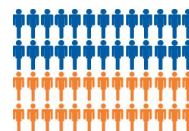


CANADIAN AEROSPACE INDUSTRY

*Economic impact**

- › Over 700 companies contribute \$28B of GDP to the Canadian economy
- › 80% of its production is exported
- › 70% manufacturing and MRO, 30% services

172,000
direct & indirect
jobs in Canada¹



50%
in Quebec²

43,500
highly qualified personnel
in Quebec²

¹ Association des industries aérospatiales du Canada et Industrie Canada (2014). *L'état de l'industrie aérospatiale canadienne*.

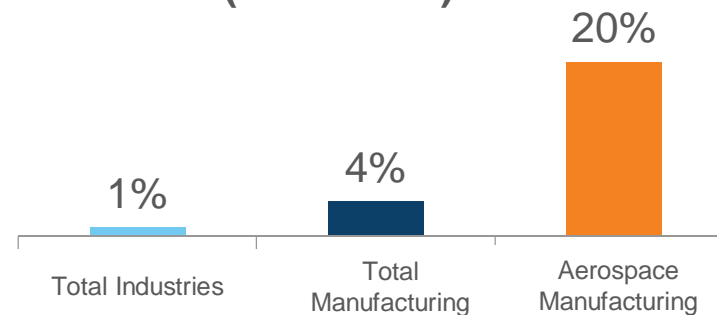
² Aéro Montréal (2014). *Rapport d'activités 2013*.

CANADIAN AEROSPACE INDUSTRY

*Innovation**

- › Each year, the industry invests \$1.7 billion into R&D
- › R&D investment increased by nearly 40% in the last five years

Canadian R&D Intensity Based on GDP (2008-2013)¹



¹Aerospace Industries Association of Canada & Industry Canada (2014). *The State of the Canadian Aerospace Industry*.

MISSION

Together, we stimulate business innovation through collaborative R&D in the aerospace industry.

VISION

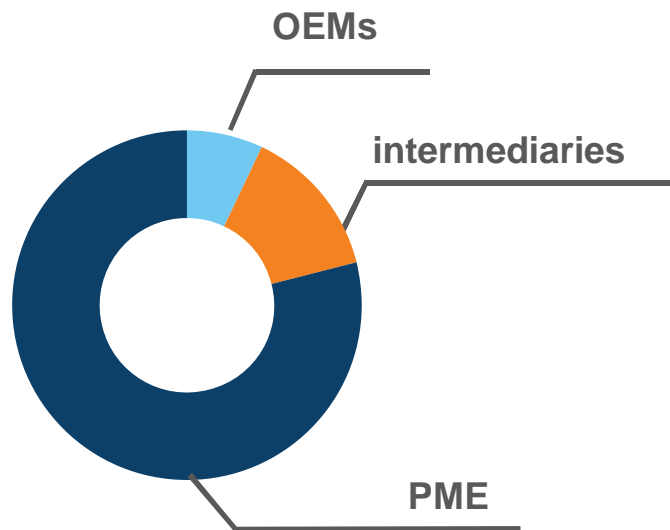
A transforming innovation model enhancing the prosperity of the Quebec aerospace industry.

INDUSTRY-FOCUSED

KEY ORCHESTRATOR

CRIAQ : A NETWORK OF LEADERS

65+ industrial members



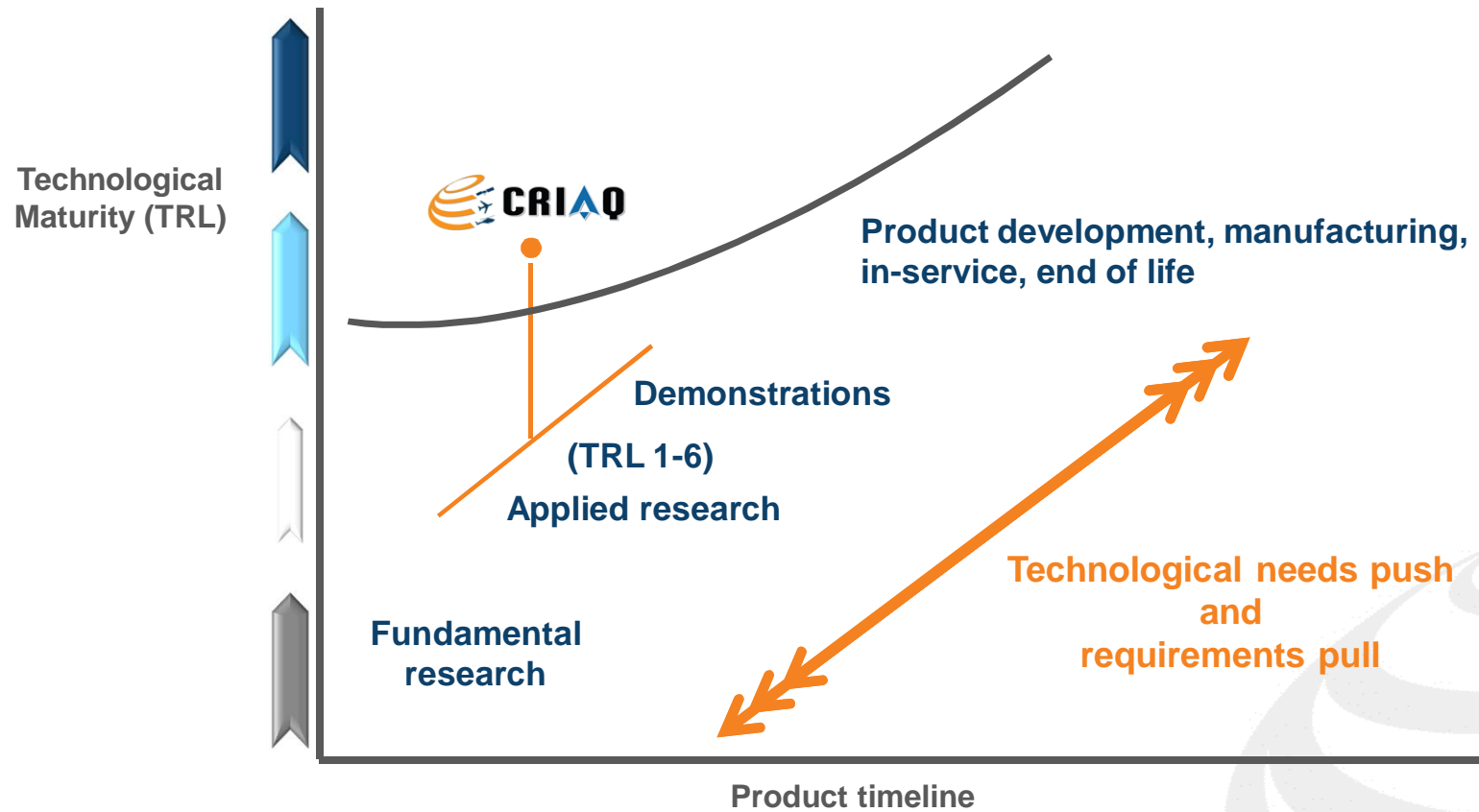
25+ academic members
universities, colleges and
research centres

1 200+ academic researchers
and industrial
specialists

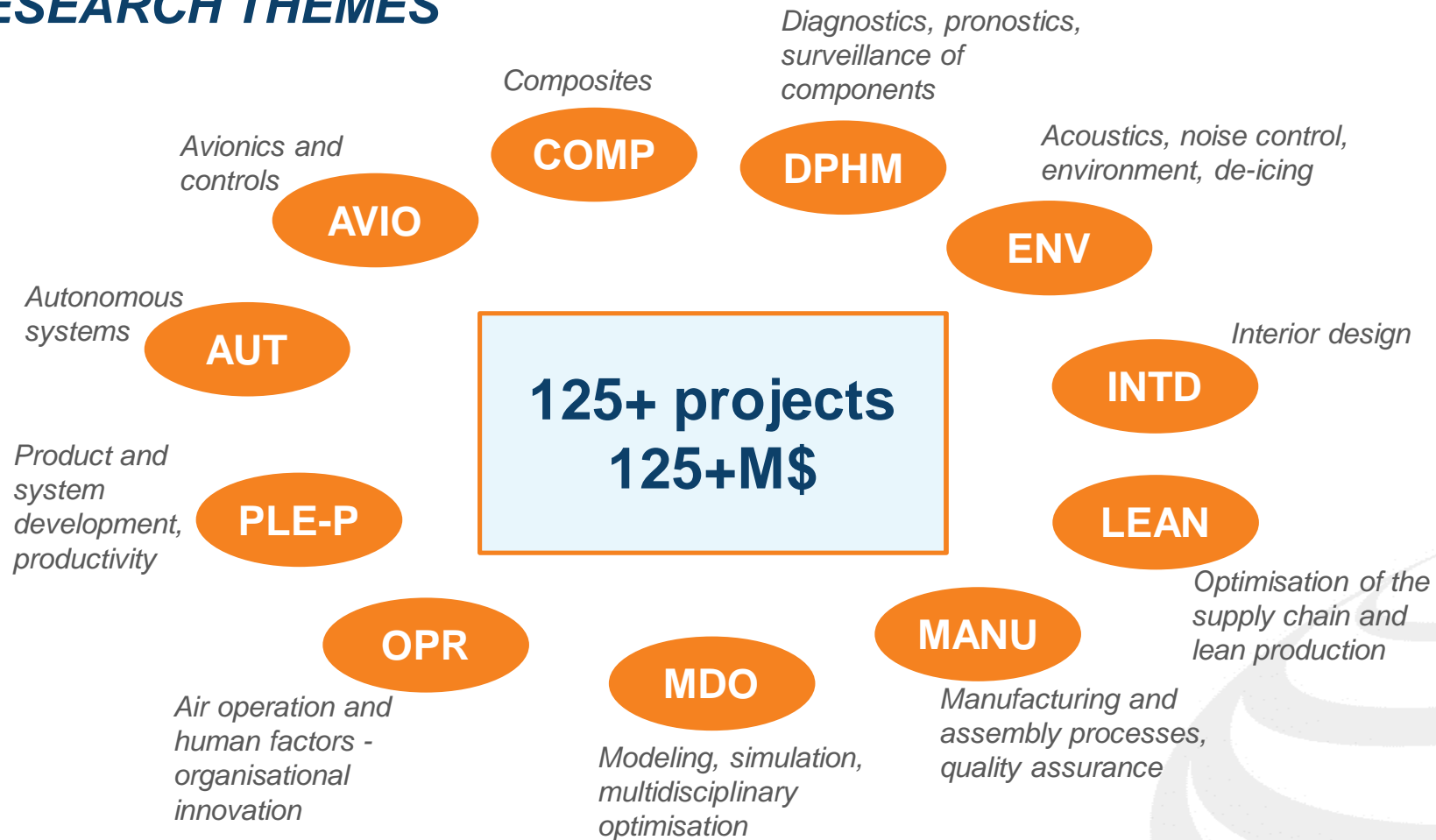
1 000+ students

30+ international
organisations
participating in our
projects

TECHNOLOGY DEVELOPMENT CONTINUUM



PROGRAM MANAGEMENT FRAMEWORK : RESEARCH THEMES



US-CA AGREEMENTS

- 1. Are there formal research agreements relevant to US/Canada research collaborations that cover aeronautics?**
 - a) National Research Council and NASA
 - b) Canadian Space Agency and NASA
 - c) Ohio and CRIAQ (MOU)
 - d) Other generic governmental R&D programs can be used to support international aerospace projects
 - e) Contractual agreements between specific organizations (industry, government laboratories, academia, etc.)

- 2. Formal programs available for funding US/Canada research collaborations that cover aeronautics**
 - a) CARIC, CRIAQ and GARDN
 - b) NSERC
 - c) MITACS
 - d) Provincial and federal generic programs

KEY PLAYERS

- 1. Who is already involved in aeronautics research collaboration between the USA and Canada**
 - a) Government labs (NRC, DRDC, NASA, etc.)
 - b) Academia
 - c) Private companies

FUNDING

1. How are these collaborations funded?

- a) Joint projects: Essentially, each country funds its own expenses and the results are put in common, according to the IP position that was negotiated.
- b) Contract agreements: funded out of the budgets of the participants
- c) Government purchases offsets (eg. CCMRD)

2. Which of these sources allow funds to cross the border?

- a) Few, if any government funding
- b) Contractual agreements are more flexible and allow funds to move across the border

3. CARIC

- a) CARIC can help within the limits of its funding and the parameters of its program

CRITICAL SUCCESS FACTORS

1. Clear value proposition
 - a) What's in it for me (different for different stakeholders)
 - b) IP is always an issue
2. Source of funding on each side
3. Compatible processes
4. Flexible programs
5. Proactive involvement of the management teams