



From Research to Regulation

The “*Whys*” and the “*Hows*”

(and the Importance of Cooperation)

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From Research to Regulation

Overview...

- Transport Canada's Mission
- The Regulatory Process
- The Elements of the Regulatory Process
 - Identification of *Issue*
 - ***Research (& Data Analysis)***
 - Development of *Proposed Regulation*
 - *Consultation*
 - ***Regulation***
- Benefit of International Research Cooperation
- Final message



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Transport Canada's Mission...

"...to develop and administer policies, regulations and services for the best possible transportation system for Canada and its citizens"

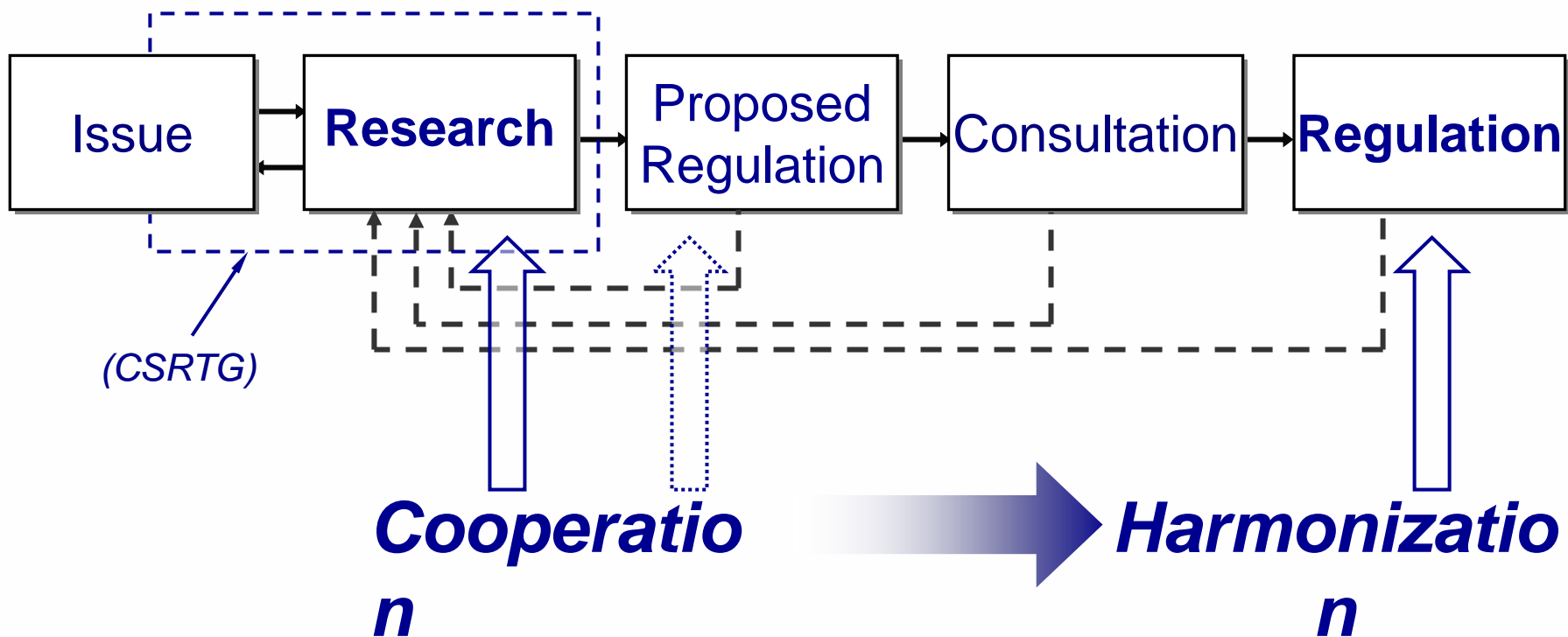
... which means:

'rules that are sound, defensible, achievable and fair'



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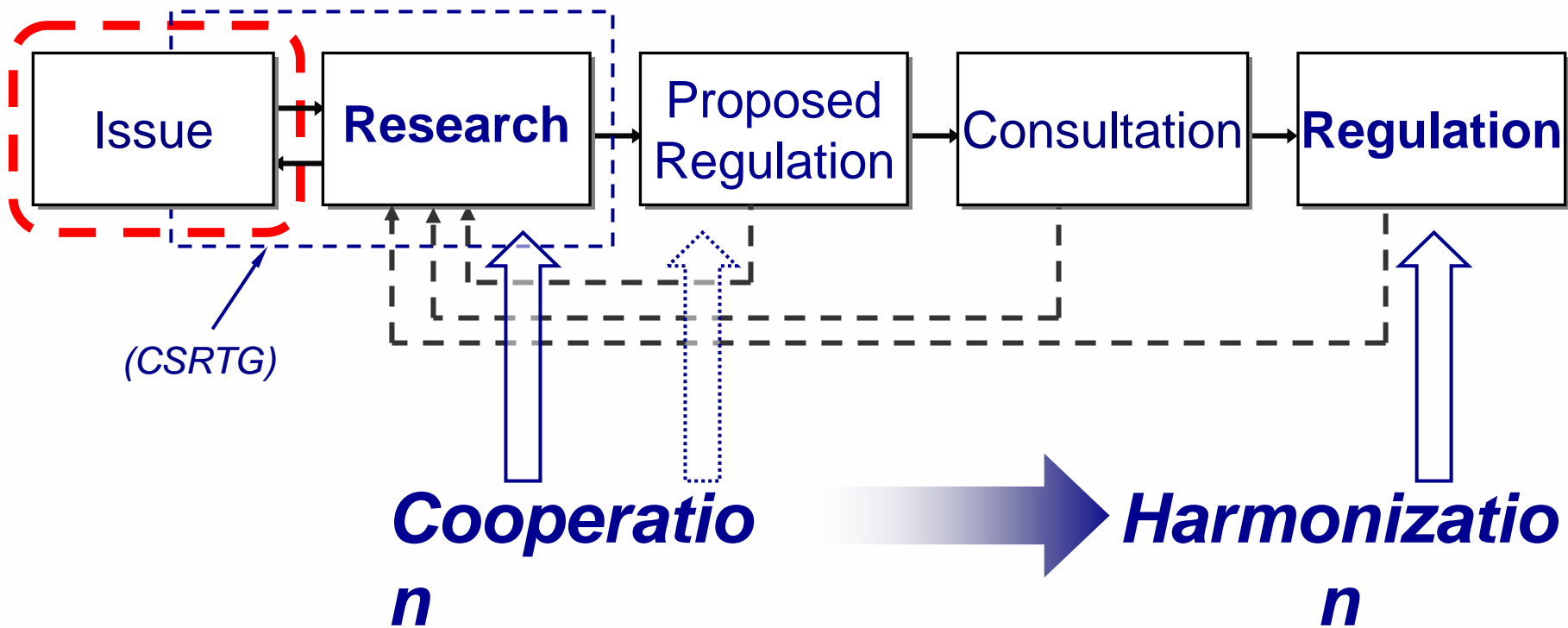
The Regulatory Process (Generic)...





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Issue...





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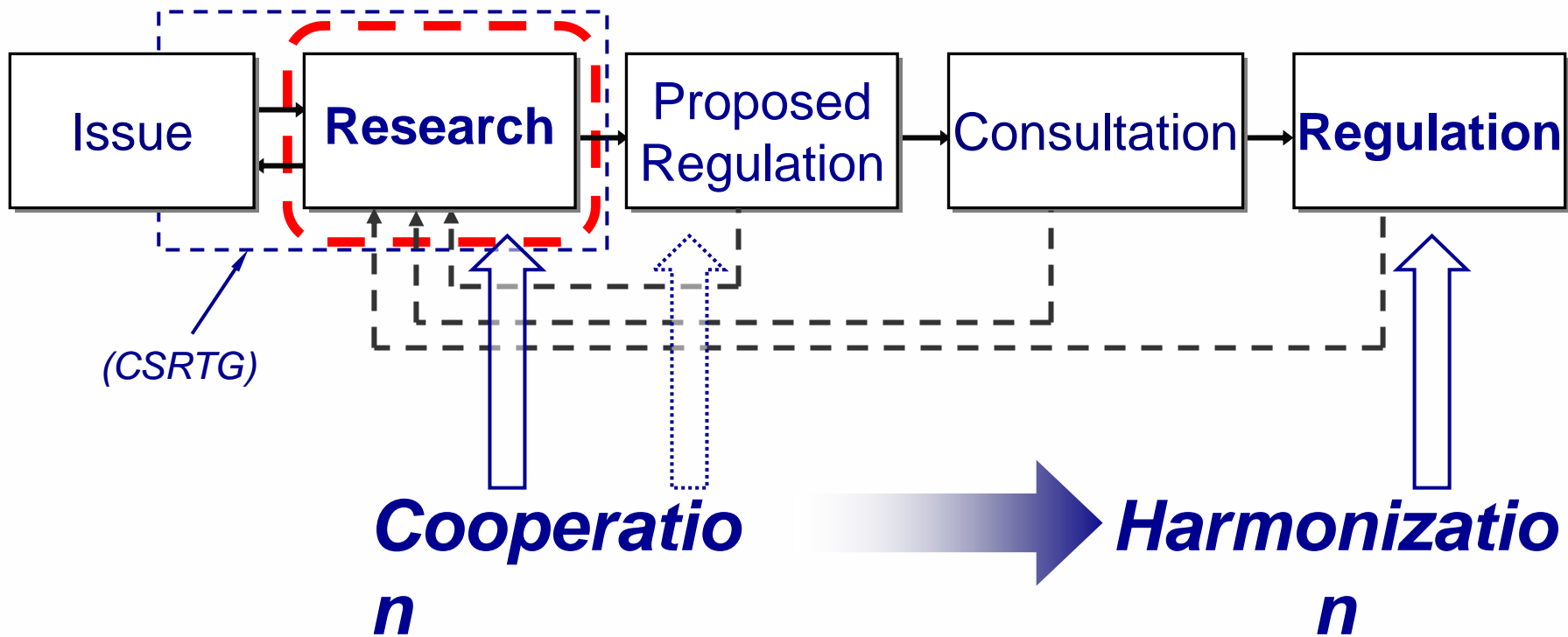
Issue...

- Initial step in the regulatory process is (obviously) the identification/definition of the issue
- Issues originate from a number of possible sources:
 - Accident investigation recommendations
 - Safety/trends analysis
 - Previous research
 - New/novel designs
 - Inadequacy of existing requirements



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Research...





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Research...

- Crucial step in the regulatory process...
- Solid research is the basis of 'sound' regulations – regulations must be "data-driven"

Involves:

- Definition of research objectives and identification/prioritization of research activities
- Conduct of initial benefit assessments
- Definition of research parameters
- Implementation of the research



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Research...

- “Research” is interpreted in its broad sense i.e., comprises development/assessment of design concepts, testing etc.,
... as well as data acquisition & analysis, benefit assessment, accident analysis, and trend analysis



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Research...

- International research cooperation is essential to maximize available resources and provide a unified basis for rulemaking
- A large proportion of research is conducted cooperatively between *authorities*, under international *Research Technical Groups (RTG's)*
- Fire and cabin safety research is coordinated through the CSRTG
- The CSRTG is a prime example of a very successful RTG



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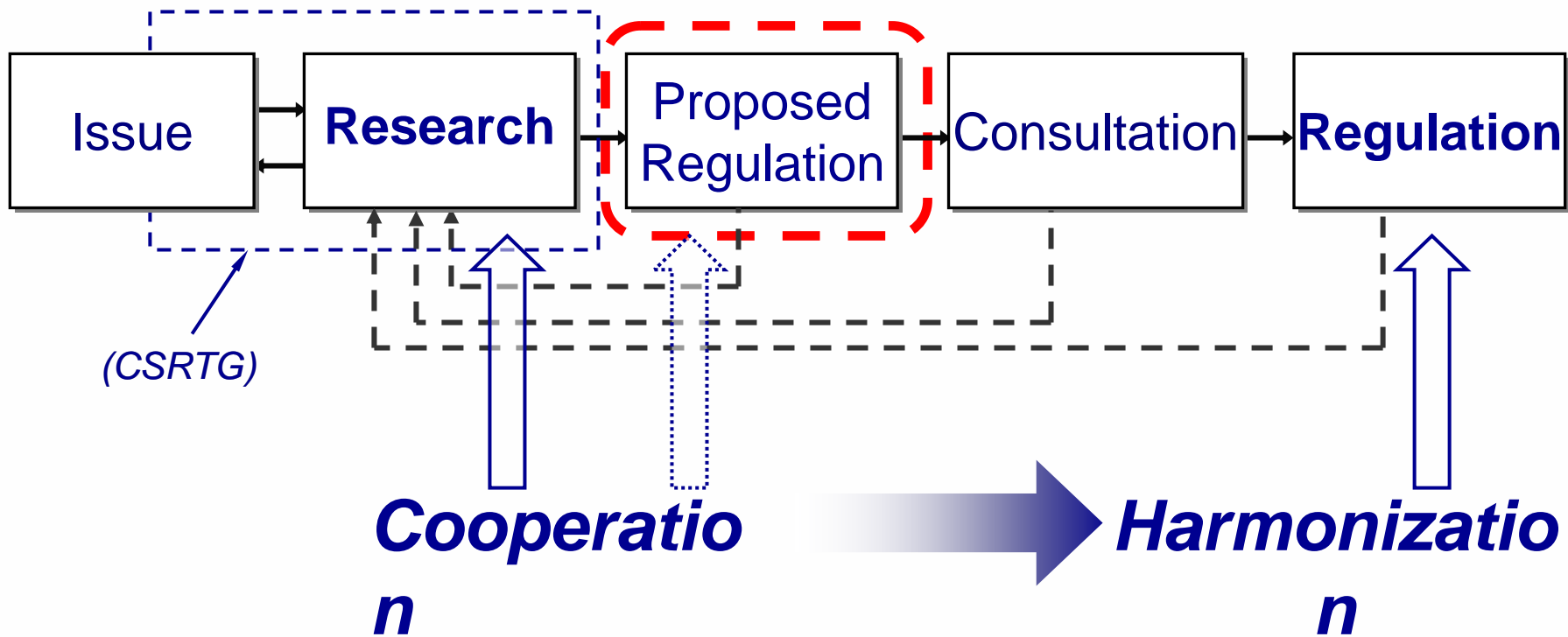
Research...

- Main areas of *fire & cabin safety* research include:
 - Systems fire protection
 - Materials flammability
 - Evacuation
 - Crash dynamics
 - Operational-type issues
- Much of the *fire and cabin safety* research is conducted in cooperation with, and with the direct support of, *industry* (mostly through FAA Working Groups)



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Proposed Regulation...





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Proposed Regulation...

- This segment of the regulatory process comprises:
 - Final assessment of issue / research results
 - *Identification/conduct of further research as/if needed*
 - Performance of Risk Assessment
 - Finalization of proposed regulation (with justifications)
 - Conduct of Regulatory Impact Assessment (RIA)



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Proposed Regulation...

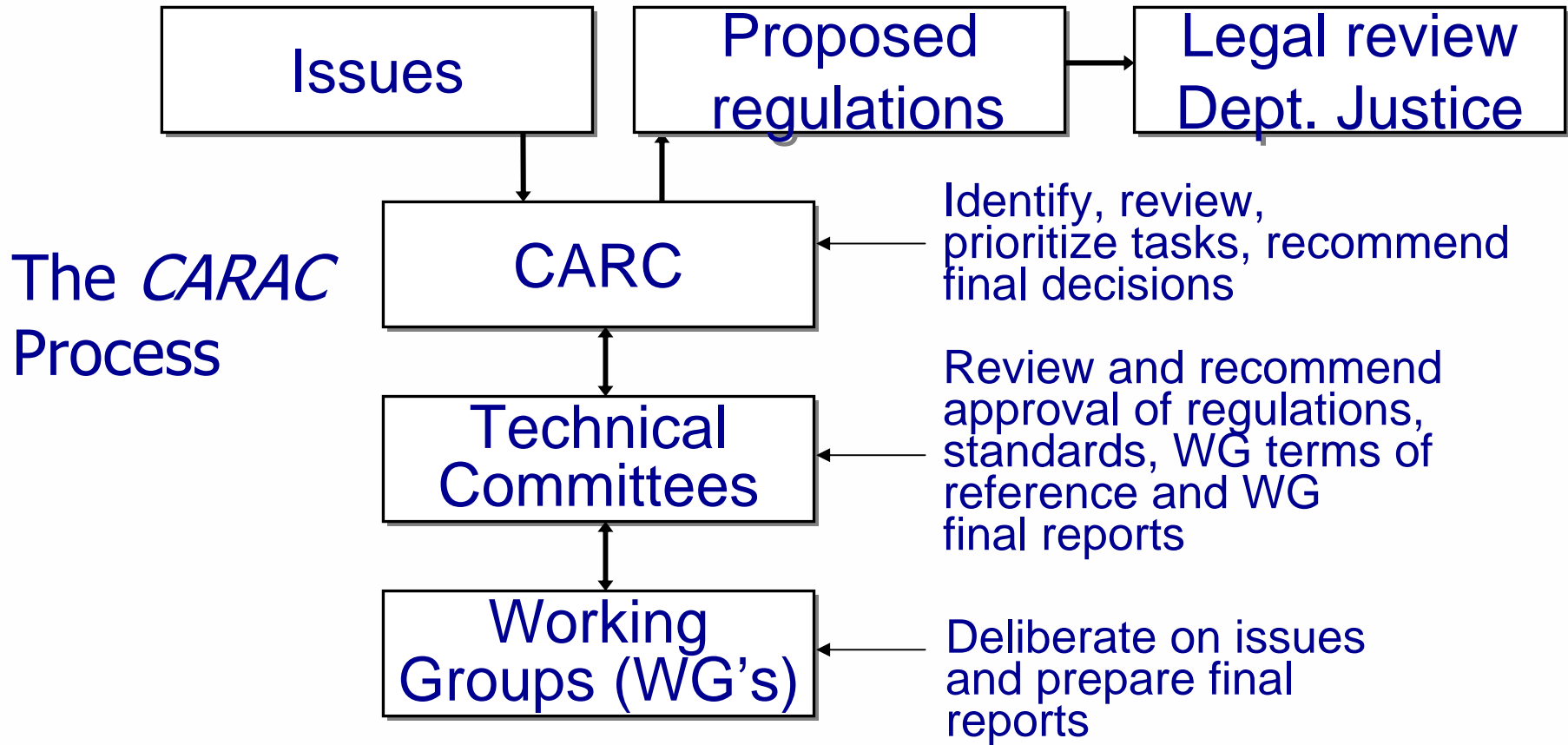
Transport Canada's Regulatory Process:

- The development of Regulations (in Canada) is done through the *Canadian Aviation Regulation Advisory Council (CARAC)* under the direction of the *Civil Aviation Regulatory Committee (CARC)*
- The main role of CARC is to “identify and prioritize regulatory issues” and to “recommend final regulatory decisions to the Minister”



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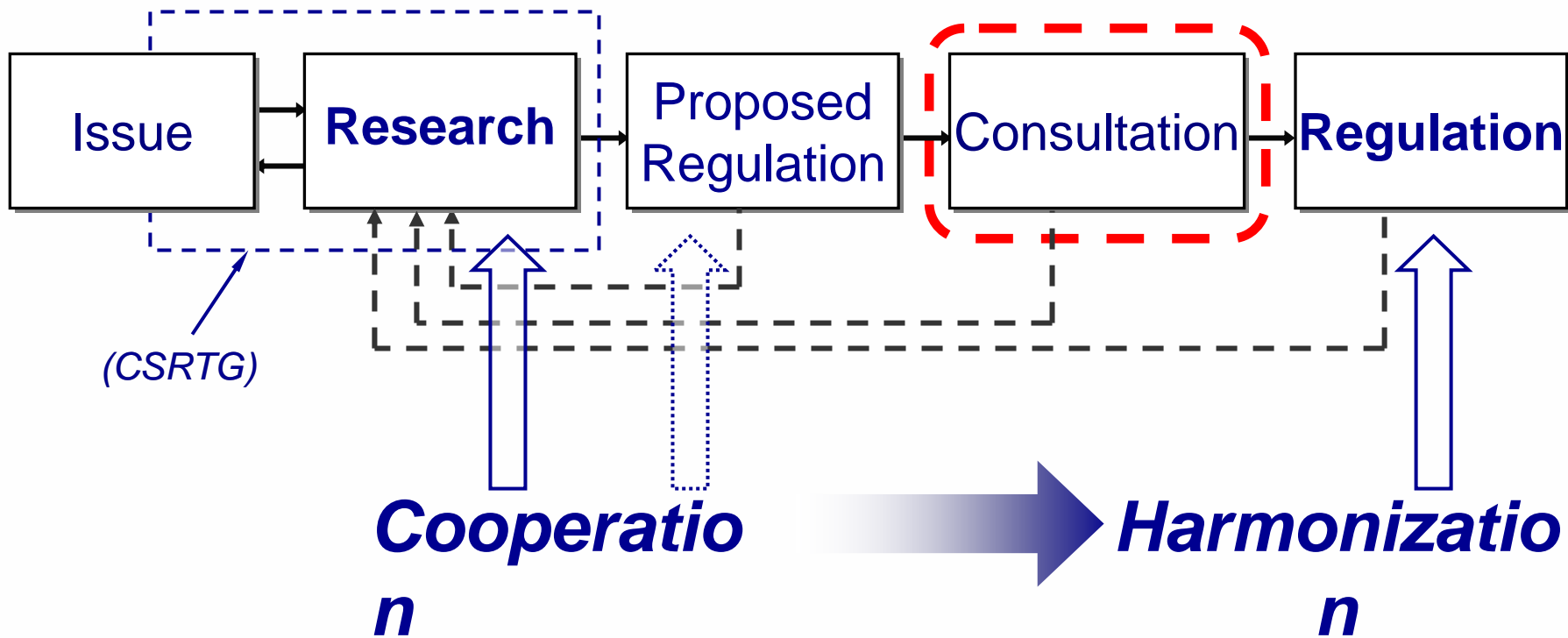
Proposed Regulation...





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Consultation...





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Consultation...

- An essential element of the process:
 - Promotes cooperation with *industry*.
 - Ensures *industry* needs are addressed.
 - Must be transparent.
- Consultation is done through the CARAC Process (WGs, Technical Committees, Canda Gazette I)
- Other Authorities have similar processes – same intent



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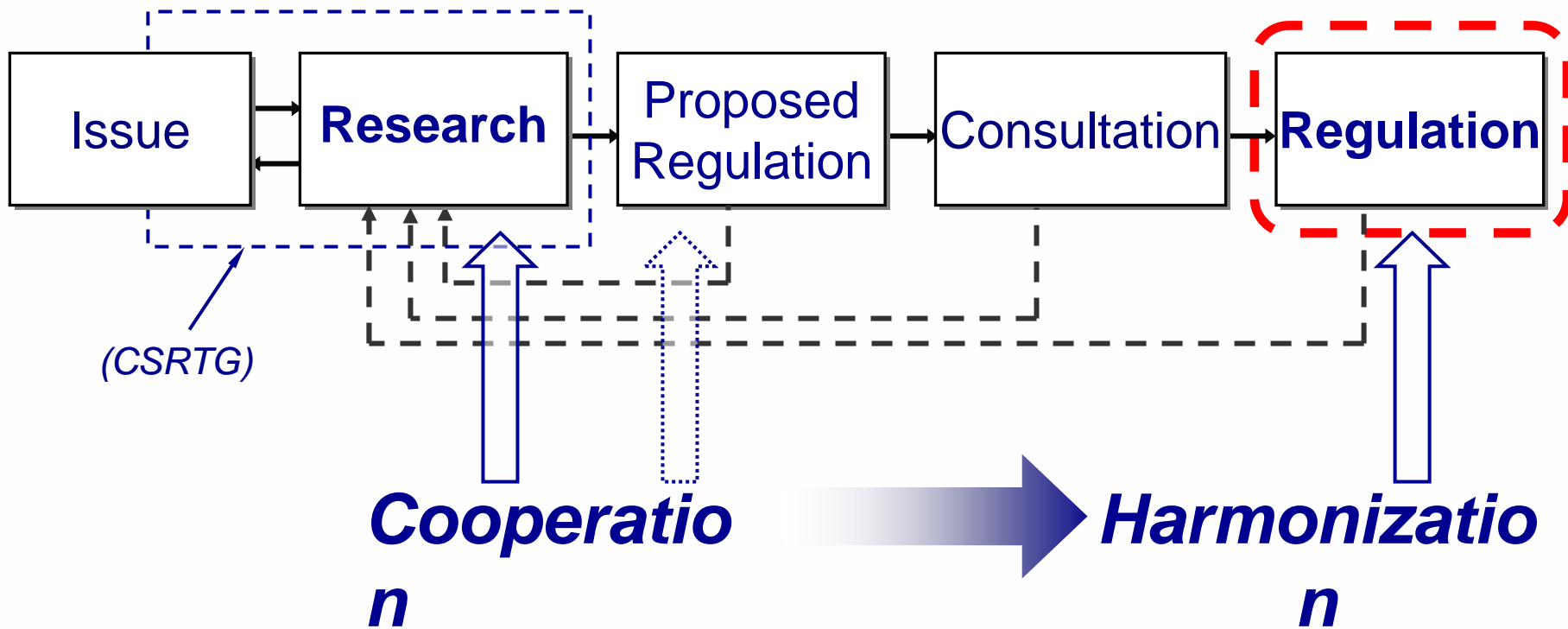
Consultation...

- Involves:
 - Publication of proposed rule, together with pertinent rationale and Regulatory Impact Assessment, with a request for comments
 - Review/disposition of the comments
 - Modification of regulation as a result of comments
- Sometimes leads to need for further research...



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Regulation...





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Regulation...

- The end of the process,
 - an *internationally harmonized regulation* –

although...

- Some authorities
 - include a *request for comments* (where further data/information is needed to 'validate' them)
 - comprise a *reporting* requirement (to monitor implementation progress)



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Benefits of International Research Cooperation...

- Maximization of funding/resources,
(and reduction of work timeframes)
- Minimizes duplication of effort
- Unified prioritization
- Agreed findings
- Harmonized Regulations
→ “Level Playing Field”



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Final Message...

- The outcome of this event wasn't a *miracle!*
- Regulations based on solid research is what made it possible..!





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Final Message...

- Regulations must be *data-driven*
- Regulations must be *achievable*
- Regulations must be *harmonized*
- Research is the foundation of regulations:
 - without research,
there cannot be **viable** regulations...
 - without cooperative research,
there cannot be **unified/harmonized**
regulations...



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Thank You..!