### **PAR Discussion – Radar Streaming Format**

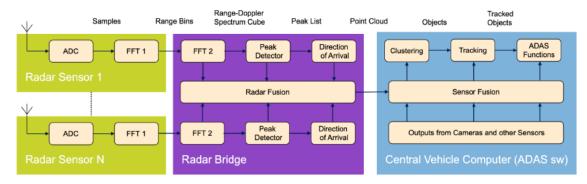
Adriaan Niess, Robert Bosch GmbH November 18<sup>th</sup> 2025



## PAR Discussion – IEEE 1722 Radar Streaming Format Introduction

#### Motivation

https://grouper.ieee.org/groups/1722/contributions/2025/2025-10-21\_1722-radar-streaming-format.pdf



#### Possible Work Items

- Add support for streaming radar data over IEEE 1722
- Multiple radar (sub-)formats required for flexible partitioning of data processing pipeline
  - Radar cube: Either raw data, or after 1<sup>st</sup> or 2<sup>nd</sup> FFT (compressed/uncompressed)
  - Optionally also include support for object data and point cloud



# PAR Discussion – IEEE 1722 Radar Streaming Format Section I

- 1.1 Project Number
  - 1722c
- 1.2 Type of Document
  - Standard
- 1.3 Lifecycle
  - Full use



# PAR Discussion – IEEE 1722 Radar Streaming Format Section II

#### • 2.1 Title

IEEE Standard for Layer 2 Transport Protocol for Time Sensitive Applications in a Bridged Local Area Network Amendment 2 – Streaming Format for Radar Applications



# PAR Discussion – IEEE 1722 Radar Streaming Format Section III

#### 3.1 Working Group:

- Audio/Video Bridging Layer2 Transport (C/MSC/P1722) Contact Information for Working Group Chair
- Contact Information for Working Group Chair:
  - Name: David Olsen (?)
  - Email: (?)
- Contact Information for Working Group Vice-Chair
  - Name: (?)
  - Email: (?)

#### 3.2 Society and Committee:

- IEEE Computer Society/Microprocessor Standards Committee (C/MSC) Contact Information for Sponsor Chair
- Contact Information for Standards Committee Chair:
  - Name: (?)
  - Email: (?)
- Contact Information for Standards Representative
  - Name: (?)
  - Email: (?)



# PAR Discussion – IEEE 1722 Radar Streaming Format Section IV

- 4.1 Type of Ballot:
  - Individual (?)
- 4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Association Ballot:
  - Jan 2027 (?)
- 4.3 Projected Completion Date for Submittal to RevCom:
  - Jan 2028 (?)



# PAR Discussion – IEEE 1722 Radar Streaming Format Section V

- 5.1 Approximate number of people expected to be actively involved:
  - 20

#### • **5.2 Scope:**

- This standard specifies extensions to IEEE 1722-2026 to add a new format to support streaming of radar data not included in the previous standard.
- Include technical and editorial corrections as well.
- 5.3 Is the completion of this standard dependent upon the completion of another standard?
  - No (?)

#### 5.4 Purpose:

- Enable distributed processing of radar data over a shared network.
- Facilitate time-sensitive transport and sensor fusion with explicit timing information contained within the frame.

#### 5.5 Need for the Project:

IEEE 1722-2026 has experienced adoption for streaming video data from cameras using e.g. Generic Image Sensor Format (GISF) and for control
of camera imagers by means of the Generic Byte Bus (GBB) format. There is still a gap to provide native support for radar streaming between
radar sensors and central compute units.

#### 5.6 Stakeholders for the Standard:

Developers and users of bridged LAN and endpoint systems supporting radar streaming applications.



# PAR Discussion – IEEE 1722 Radar Streaming Format Section VI

- 6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project?
  - No
- 6.1.2 Is the Standards Committee aware of possible registration activity related to this project?
  - No

# PAR Discussion – IEEE 1722 Radar Streaming Format Section VII

- 7.1 Are there other standards or projects with a similar scope?
  - No
- 7.2. Is it the intent to develop this document jointly with another organization?
  - No

# PAR Discussion – IEEE 1722 Radar Streaming Format Section VIII

- 8.1 Additional Explanatory Notes:
  - None