Canon Research Centre France (CRF)

A CANON GROUP COMPANY

CRF BY NUMBERS

CANON BY NUMBERS (2024)

Located in Competitive Research Area for Image & Networking Rennes (FR)

Active participation to 4 major SDOs

3GPP A GLOBAL INITIATIVE · IEEE 802.11™ · ETSI · ISO

Contributions: JPEG2000, DECT, Web services, HEVC, VVC, DASH, IEEE 802.11, 3GPP

34 years in business, Researching in image processing and networking

100% Canon Group affiliated company

334 consolidated subsidiaries worldwide

49 permanent staff (41 Engineers & PhD)

170,340 employees

€ 8.6 million Gross profit in 2025

€ 29.1 billion net sales*
€ 1.0 billion net income*
*Exchange rate, 1€ = 155JPY

80% Global R&D
20% BU specific

100% EU inspired

7.48% of net sales spent in R&D

https://global.canon/en/corporate/pdf/pdf/canon-story-2025-2026-e.pdf

Industrial 7.9% | **55.9%** **Printing**
Imaging 20.8% | 12.6% Medical

Global R&D

- CRF is developing technologies in **imaging and communication domains, aiming at technologies to be standardized** to support Canon group business activities, worldwide.
- In close cooperation with Canon Inc and European Subsidiaries
- Leveraging CRF localization in Europe (Horizon Europe)

Canon Research Centre France S.A.S
Rennes, France
R&D of standard imaging and networking technologies

1 Canon Inc

Headquarters (Shimomaruko)... R&D Areas. Development of digital cameras, etc..

2 AXIS Communications AB
Lund, Sweden
R&D of network video solutions

3 Milestone Systems A/S
Copenhagen, Denmark
R&D of video management solutions.

4 Canon Medical Research Europe Ltd
Edinburgh, U.K.
R&D of clinical decision support systems AI automation

CRF participation in EU projects

- **SECREDAS: 2018-2021 (completed)** ***https://secredas-project.eu/***
  - Improving Safety and Security of automated vehicles
  - CRF: Detection in real-time of abnormal C-ITS messages

69 partners, 42 months

- **SELFY: 2022 – 2025 (completed)** **https://selfy-project.eu/**
  - Toolbox for Self awareness, Self protection, Self healing in Trusty CCAM
  - CRF: Road Side centred tools for situational awareness

16 partners, 36 months

- **ROADVIEW: 2022-2026** **https://roadview-project.eu/**
  - More powerful and reliable on-board vehicle perception and decision-making technologies addressing complex road environmental conditions
  - CRF: road infrastructure based robust perception system

16 partners, 48 months

- **MYRTUS 2024-2026** **https://myrtus-project.eu/**
  - Computing continuum infrastructure for IA based cyber physical systems integrating edge, fog and cloud computing
  - CRF: Edge compute continuum for mobility use case

13 partners, 36 months

- **iEXODDUS 2024-2027** **https://iexoddus-project.eu/**
  - Enhancement of the continuity or expansion of ODDs (Operational Design Domain) for connected automated vehicles
  - CRF: improved road side perception and coordinated decision making.

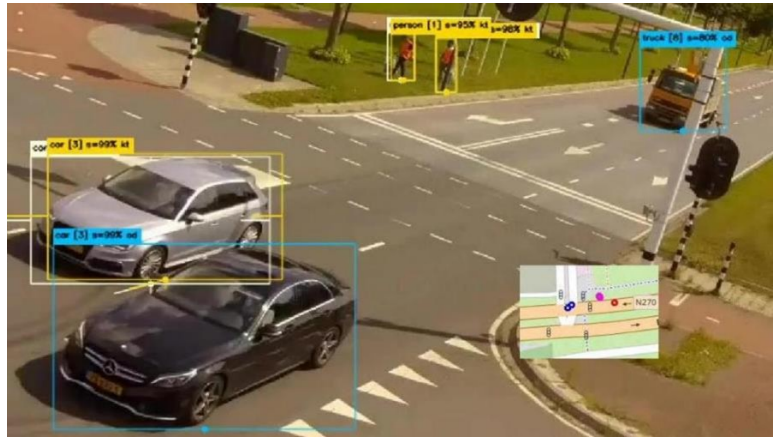
14 partners, 36 months

CRF Technology assets

- Multi modal sensing: cameras, Lidars
- Identification and tracking, by AI-powered VCAs
- Detection: cars, trucks, buses, pedestrians, cyclists
- 3D positioning & Geo mapping
- Generation of C-ITS CPM messages

Characteristics

- Frequency: 10 fps
- Position accuracy: 50 cm
- Lighting conditions: Daylight – Weather adjustable



Technologies of interest for CRF

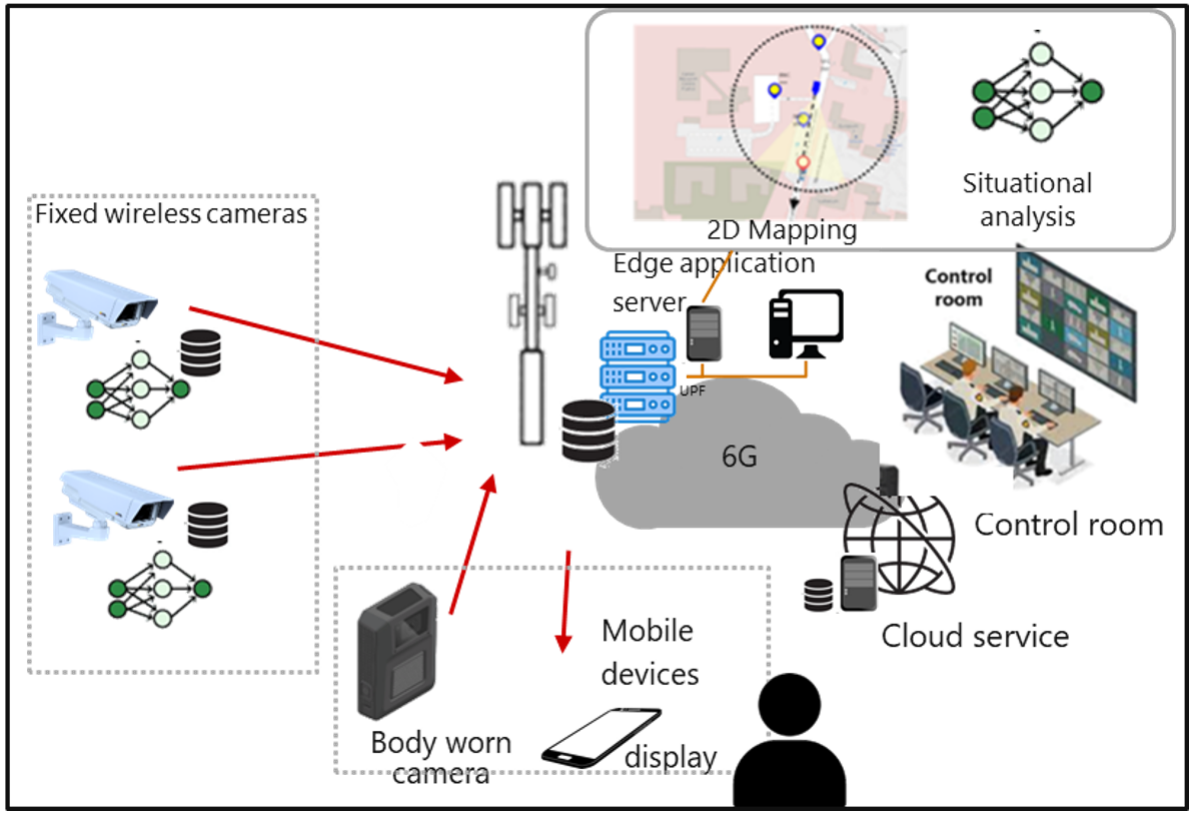
- 6G sensing with UE camera in the loop for sensor fusion (e.g. vision aided sensing)
- Real time multimodal transmission for 3D scene capture enabling virtual worlds
- Network for AI and computing continuum for distributed, federated and sustainable AI data processing in multi-camera systems.
- Network exposure for seamless access to core network functions enabling better user experience and camera system optimization.

The 6G key features to boost future business

Verticals we aim at

- Industry/Manufacturing (i.e. process monitoring, AGV, AMR),
- Transportation / Logistics
- Emergency and Safety Services, automated video surveillance
- Healthcare

CRF's multi camera solution for SNS



Horizon Europe calls for projects 2026 / 2027

CALL	CRF contribution ideas (example)
• **HORIZON-JU-SNS-2026-STREAM-B :** Collection, Generation and Validation of Datasets suitable for training AI Models for 6G Networks	6G multimodal dataset creation: metadata from camera (3D depth map, object classification, positioning, etc.) to complement 6G network data (sensing, positioning, heat map, etc.) for business intelligence, perimeter surveillance, etc
• **HORIZON-CL4-2026-04-HUMAN-01 :** Developing and demonstrating core technologies for Virtual Worlds and Web4.0	Scene 3D capture (3D perception), real time transmission and visualization.
• **HORIZON-CL4-2027-04-DATA-03 :** New approaches for decentralized, federated and sustainable AI data processing	Distributed AI-based vision processing between the camera edge, edge, fog, cloud continuum.
• **HORIZON-CL4-2027-04-DATA-08 :** Demand-side 3C pilot demonstrators on converged Telco Edge Cloud Infrastructure	• Others …

Thank you

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