NEW NEEDS,
NEW POSSIBILITIES

CAF

OPT10®
YOUR CBTC **OPTION**
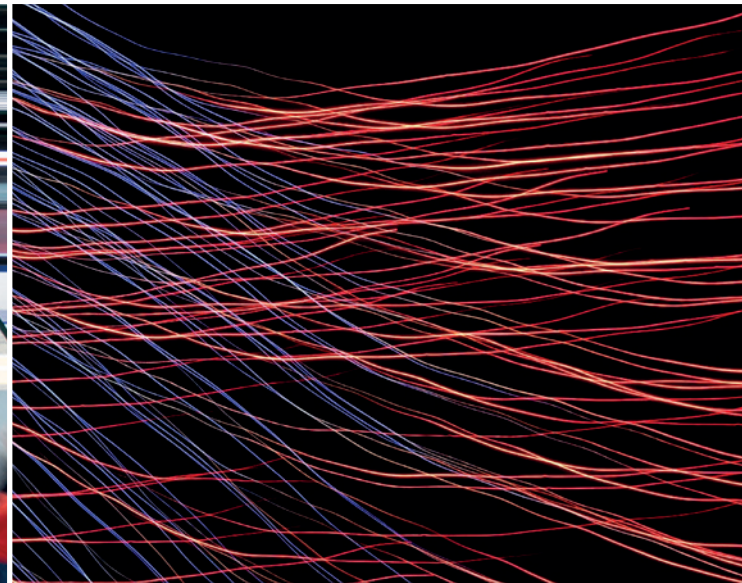
OPT10®
YOUR CBTC **OPTION**

MORE **CAPACITY**
MORE **SECURITY**
MORE **FLEXIBILITY**
MORE **PUNCTUALITY**

/ FOR AN **OPTIMUM**
URBAN MOBILITY

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GET YOUR CITY READY
FOR THE FUTURE

PUBLIC TRANSPORT PLAYS A CRUCIAL ROLE IN TURNING CITIES
INTO MORE PRACTICAL AND SUSTAINABLE ENVIRONMENTS.

Transport systems must therefore embrace modern digital modes to meet constantly rising passenger demand through:

Improved quality of service

Enhanced punctuality and train frequency

Flexibility in operations

Optimised energy efficiency and LCC

Safety & reliability

OPTIO is CAF´s CBTC system including ATP (Automatic Train Protection), ATO (Automatic Train Operation) and ATS (Automatic Train Supervision), compliant with IEEE 1474 and IEC 62290 standards.

Using cutting-edge technologies, OPTIO can be integrated in all kinds of urban operations. Achieving highest levels of availability in safety critical operations, adapting to customer operational and maintenance needs, OPTIO allows rail operators to take their infrastructures to the next level through flexibility, adaptability and scalability.

TECHNICAL FEATURES

SAFETY
OPTIO fulfils CENELEC 50126, 50128 & 50129 standards, achieving a Safety Integrity Level 4 (SIL4).

AVAILABILITY
Main components of OPTIO solution rely on the cybersecure safety platforms from CAF with a 2oo3 architecture, providing a high availability and fault tolerance.

FLEXIBLE & SCALABLE
The system can be deployed in any automation grade (GoA1 to GoA4) and offers the possibility of a step-by-step approach. Starting with GoA1 or GoA2 operation, it can progressively upgrade to reach GoA3 or GoA4 operations, allowing a smooth transition and adoption of technology.

NEW LINES & MODERNIZATIONS
OPTIO completely supports new lines' deployments and different migration strategies of existing lines. The system is prepared to interface with legacy systems and allows custom strategies to deliver integrated cutting-edge technologies to all rail operators.

ENHANCED CAPACITY
OPTIO is designed to be delivered as a moving block system, but also supports fixed block functionality for migration of existing lines. Additionally, the system can rely on secondary detection as a fallback, if required by the customer.

SUPPORTING DIFFERENT WIRELESS COMMUNICATIONS TECHNOLOGIES
OPTIO works based on cybersecure IP train-to-ground communications. The solution supports different wireless technologies (WiFi, LTE or 5G) and architectures, always seeking customer's preferences.

HIGH OPERATIONAL PERFORMANCE
OPTIO can help operators to meet the schedule, being at the same time, extremely efficient in energy consumption, and adapting to demand and network situation continuously.