

The city of Nice

Catenary-free Citadis trams for Lines 2 & 3

Metropole Nice Cote d'Azur (NCA) renewed its confidence in Alstom for the extensions of its tramway network, Line 2 (West-East Line) and Line 3. Alstom's innovative offer comprises Citadis vehicles equipped with its latest catenary-free solutions, allowing the tram to integrate smoothly into the city and to operate with high levels of safety & comfort.



Country..... France

Context..... Further to a successful collaboration on Line 1 with the supply of 20 Citadis trams in 2006 as well as 8 additional trams and modules in 2010, Alstom was awarded a new contract by Metropole Nice Cote d'Azur in November 2015 for Lines 2 & 3. In the context of its blueprint for the **Urban Transport Network** up until 2030, NCA needed an innovative and differentiating tramway system able to run without overhead wires. The first trams are scheduled for delivery as of **2017** with entry into service on the 11.3-km West-East Line planned in **2018/2019**.

Solution..... Alstom brings a state-of-the-art solution with the latest evolutions of its tramway and infrastructure portfolios: **Citadis X05** equipped with **Citadis Ecopack on-board energy storage solution**; and **SRS, Alstom's innovative ground-based static charging system by contact**.

The Citadis X05 trams will run on Line 2 from the airport (West) to the port (East), and then on Line 3 serving the new stadium area. Each vehicle can carry up to 300 passengers, offers spacious individual seating and extra-large screens for the display of journey information, and is equipped with double doors all along to increase accessibility and fluidity in stations.

Thanks to **Citadis Ecopack**, the tram will be able to run off-wire over standard inter-station distances, thereby eliminating obtrusive catenary lines and masts, minimizing visual impact and facilitating access in the city. Citadis Ecopack cubicles will be charged at passenger stations during normal dwell time using **SRS**, a catenary-free electrification solution designed by Alstom to recharge on-board energy storage at ground level, preserving the cityscape and ensuring total safety for all road users and pedestrians.

Alstom also offers solid commitments of **reliability** and **sustainability** for the SRS and Citadis Ecopack systems. In addition, Alstom develops with NCA a partnership with a potential 12 year-maintenance contract option for the autonomy scope.

KEY BENEFITS

Improved passenger experience

Citadis X05 trams offer increased comfort, better accessibility and high product safety and reliability. Citadis X05 tram is also **98% recyclable** and consumes **up to 30% less energy**, with improved life-cycle costs.

Advanced catenary-free offering

which allows seamless integration of the new tramway line into the urban environment while preserving the city's architectural heritage.

High energy charging capacities

Alstom's SRS allows the tram to charge its Citadis Ecopack cubicles automatically in **20 seconds** at each station.

PROJECT HIGHLIGHTS

ROLLING STOCK

Vehicle length	44 m
Vehicle width	2.65 m
Number of trams	19 Citadis X05 Up to 18 additional trams
Capacity	300 passengers
Maximum speed	70 km/h
Security/safety	Real-time video surveillance system Fireproof materials (EN45545-2)
Passenger information	Extra-large screens for journey information
Comfort and accessibility	7 double doors per side, low-floor boarding, accessible for all (including persons with reduced mobility)



ENERGY

On-board energy storage equipment	Citadis Ecopack
Fast-charging equipment	SRS (ground-based static charging by contact)
Line Voltage	750 V _{DC}

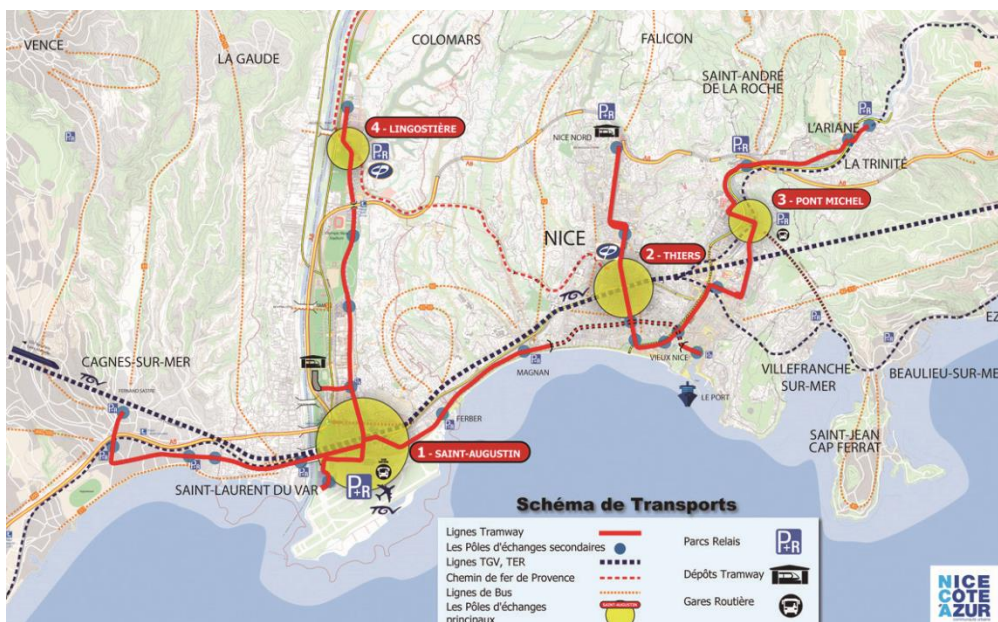


MAINTENANCE

Full autonomy scope (Citadis Ecopack & SRS)	12 years (in option)
--	----------------------

LINE FEATURES

Line 2	11 km (3.3 km underground) 20 stations (4 underground) Fully catenary-free at-grade
Line 3	6.8 km (3.9 km non-cumulated with L2) 6 additional stations Fully catenary-free



For more information
please contact Alstom:

Alstom
48, rue Albert Dhalenne
93842 Saint-Ouen, Cedex France

Phone: +33 1 57 06 90 00

Visit us online:
www.alstom.com