Amiens Métropole chooses Irizar for its BHNS (High-level bus service)

The Irizar ie tram was chosen by Amiens Métropole to equip its future BHNS network with a 100% electric bus. 43 buses of this type will circulate in Amiens by April of 2019. This acquisition means that the "BHNS" project in Amiens is the most ambitious of its type for electric rolling stock in Europe.

At Busworld, which is a global public transport fair in Courtaul, Belgium, Alain Gest, President of Amiens Métropole, unveiled on Monday 23rd October that the choice of the tender commission which has retained Irizar e-mobility, a company of the Spanish group Irizar (Basque Country) will make a global reference in the field of the manufacture of buses and coaches in order to equip the future BHNS (High-Level Bus Service) network. The 100%
electric Irizar ie tram is an articulated 18-metre vehicle that operates on a principle of rapid change in Terminus with pantographs an intelligent form of charging in the depot.

“As part of this project, Amiens Métropole is able to fully justify its “positive energy territory for green development” label which was awarded by Ségolène Royal, the Minister for Ecology, Sustainable Development and Energy back in 2015. Our agglomeration is positioning itself as one of the most pioneering territories in the development of all-electric energy and the search for new methods of innovative and sustainable mobility in terms of environmental issues which are consistently on the increase”, said Alain Gest.

These non-polluting vehicles are 100% electric and will run on three of the four BHNS lines. They will not generate any noise or cause environmental issues. This was one of the challenges faced by Amiens Métropole to modernize its public transport network via a vehicle project with zero percent pollutant emissions, and to form part of the route towards sustainable mobility.

**History of the approach**

The elected officials of Amiens Métropole have opted for a new generation of vehicle combining the advantages of the tram, while also retaining the flexibility of conventional thermal or hybrid vehicles. Another strong wish is that this new electric transport system should emit zero atmospheric pollutants (zero vehicle emissions).

**A competitive dialogue for the design of 43 vehicles**

An initiative was introduced back in 2016 by Amiens Métropole in order to acquire 43 high-capacity, non-polluting vehicles as part of the implementation of the BHNS project which “redesigns the city” (at a cost of € 122M).

A competitive dialogue has been introduced with global manufacturers in order to acquire zero-emission rolling stock. This choice remains consistent with the technological developments which are changing the landscape of today’s public transport and the expectations of energy transition.

Following several months of consultation, the business model was refined and turned into an electric form technology with rapid charge in Terminus and intelligent charging at the depot. After analysing the various proposals, the Irizar group was selected to manufacture all 18-metre electric vehicles, with a capacity exceeding 140 places as well as all the infrastructures required for them to operate correctly.

At 18.73 m long, the *Irizar ie tram* comprises of four sliding access doors and has a capacity for 155 passengers, whilst it is also compatible with the speed of lines on high level services. The combination of high capacity, ease of access and interior traffic, along with the flexibility of an urban bus as well as the zero emission condition all provide the DNA of this new vehicle.
An elegant design

*The Irizar ie tram* consists of a design that starts from a refined aesthetic language without decoration and in which all its specific elements comply with concrete functional aspects. One of the most pertinent features is the chrome arc, which surrounds the vehicle's bodywork, which allows it to be identified visually with immediate effect. The ring frames the large glazed area of the side windows that forms a painting which reflects the urban surroundings. However, Amiens Métropole will personalise its buses.

State-of-the-art and avant-garde technology

The technology, which has been developed and implemented by the Irizar Group is based on the experience and in-depth knowledge of each of the areas involved during each installation and the collaboration with the most prestigious research and development centres throughout Europe.

This is a type of technology tested in Irizar e-mobility laboratories and inside their vehicles.

The high-density powerful and long-lasting batteries are evident, and are made from lithium ion and belong to the LTO family (Lithium Titanate Oxide).

Irizar uses Toshiba's 23 Ah SCIBtm technology for each cell. The cells are arranged in modules which comprise the final battery. This type of technology is able to handle high charging currents without losing their long service life. Amiens Métropole leases the batteries.

Pantograph charging

This type of charging occurs when the vehicle does not have the autonomy required to complete the day, and it is charged during the journey in addition to being charged at the depot.

The charging stations are located at strategic locations in the city at the terminal or the beginning of each line. The system, which comes equipped with an articulated arm, allows the bus batteries to be charged via either an automatic or manual connection. The operation can be completed in approximately five minutes.

A new ticketing system

A new ticketing system will be introduced throughout the network. It is innovative, and this system will be adapted to technological developments in order to guarantee a greater fluidity and more suitable accessibility to the network.
The ticketing system will in fact be renewed to facilitate the use and to encourage occasional users to become regular users. It should also be noted that a new passenger information system is being put in place to provide more transparent information to passengers.

The IRIZAR Group

Irizar is a group of companies with an international presence, and is a leader in the passenger transport sector with reference to the field of electro mobility, energy, electronics, connectivity and rotary machinery.

It comprises of seven brands (Irizar, Irizar e-mobility, Alonza, Datik, Hispacold, Masats and Jema), and Irizar develops its production plants in Spain, Morocco, Brazil, Mexico and South Africa. It employs 3,000 people with a commercial presence in 90 countries across five continents and has a turnover of € 580 million.

The parent company headquarters is Irizar s.Coop, which was founded in 1889, and is located in Ormaiztegi in Spain, where the research and development centres are also located.

Press contact:
City of Amiens Press Relations Service - Amiens Métropole
Michel Collet 03 22 97 40 99
m.collet@amiens-metropole.com
Sandrine Gandega 03 22 97 43 24
s.gandega@amiens-metropole.com