



## PRESS RELEASE

### Berlin opts for Solaris electric buses

Bolechowo, 01.07.2015

**Emission free, exceptionally quiet and smooth – it is the shortest way to describe the ride on the Solaris Urbino 12 electric. Four of these eco-friendly buses are about to start running on the line 204 in Berlin. On 1st July 2015, the official presentation of Solaris electric vehicles took place at the Indira-Gandhi-Strasse Berliner Verkehrsbetriebe bus depot.**

**amp;<sup>st</sup> July 2015, the official presentation of Solaris electric vehicles took place at the Indira-Gandhi-Strasse Berliner Verkehrsbetriebe bus depot.**

Representatives of German Federal Ministry of Transport and Digital Infrastructure, Berlin Senate as well as the project partners were present at the official presentation of Solaris Urbino 12 electric on 1<sup>st</sup> July 2015. After the demonstration of the inductive charging system all the guests took the first ride on the bus to see the benefits of electric vehicle. Today, four Urbino start to run on the test line 204 in order to be ready for the middle of summer when they are to be put into regular passenger service.

The electrically powered Urbino 12 electric for Berlin is a completely emission-free. As it exhausts no harmful fumes, there is also nothing to smell. Thanks to the noiseless and vibration-free electric drive from Vossloh Kiepe the Solaris vehicle stands out by its extremely quiet and comfortable ride. It will of benefit to passengers, local residents and the environment at the same time. With the four new buses CO<sub>2</sub> emissions will be reduced by about 260 tons per year. To achieve the same effect approximately 250 passenger cars in Berlin would have to be electrified.

The newly purchased Urbino electric will be tested on the route starting at Technical University and ending at the Südkreuz station. Buses will go through many important interchange points in Berlin such as Berlin Zoologischer Garten railway station, thereby significantly supporting the highly developed city transport network. The Bombardier battery set with a capacity of 90 kWh will be charged with a use of the inductive PRIMOVE system at two terminal stops. With an output of 200 kW the recharging process will take just a few minutes and it will enable the buses to cover the distance to the next charging station. Electric drive system from Vossloh Kiepe and 160 kW asynchronous central motor guarantee good and smooth acceleration and 65 km/h maximum speed.

Once the buses start their regular service during the summer, Berlin citizens will receive another mean of transport which is driven by electric energy – after trams, the underground and solar powered ferries. Berlin “E-Bus-Berlin” program has been funded by The Federal Ministry of Transport and Digital Infrastructure with €4.1 million. Technical University of Berlin has been supporting the project scientifically.

#### Technical details

<b>Manufacturer</b>	Solaris Bus & Coach
<b>Type of the vehicle</b>	Urbino 12 electric
<b>Length x Width x Height</b>	12,0 m x 2,55 m x 3,35 m
<b>Gross vehicle weight</b>	18.000 kg

<b>Maximum speed</b>	65 km/h
<b>Total passenger capacity</b>	up to 70
<b>Seats</b>	33, 19 pedestal-free seats
<b>Folding seats</b>	3
<b>Drive manufacturer</b>	Vossloh Kiepe GmbH
<b>Electric motor</b>	Asynchronous central motor, Power: 160 kW Type: TSA TMF 35
<b>Battery set manufacturer</b>	Bombardier Transportation
<b>Traction batteries</b>	PRIMOVE Batterie 90, Type: lithium-ion, Capacity: 90 kWh, Voltage: 400 V
<b>Air-conditioning</b>	Konvekta UL500EM
<b>Heating system (electric)</b>	Spheros, 20 kW
<b>Front axle</b>	ZF RL 82 EC
<b>Drive axle</b>	ZF AV 132
<b>„E-Bus Berlin“ Project Data</b>	
<b>BVG Bus line</b>	204
<b>Termini</b>	S Südkreuz, S+U Zoologischer Garten (Hertzallee)
<b>Number of stops</b>	18
<b>Length of the route</b>	6,1 km
<b>Travel time?</b>	~24 min
<b>Frequency</b>	20 min
<b>Number of buses</b>	4
<b>Charging system manufacturer</b>	Bombardier Transportation
<b>Inductive charging system</b>	PRIMOVE 200 charging system, Charging power: 200 kW, Efficiency: 90%, Grid connection: AC 400 V
<b>Charging points</b>	<ul style="list-style-type: none"> <li>• 2 on the route (Südkreuz and Hertzallee)</li> <li>• 1 at the BVG depot (Indiry Gandhi street)</li> </ul>
<b>Charging time</b>	4 to 7 min on terminal stops
<b>CO<sub>2</sub> emission reduction</b>	1.300 g/Bus-km, around 260 tons annually (the whole line)
<b>Partners</b>	<ul style="list-style-type: none"> <li>• Berliner Verkehrsbetriebe (BVG) AöR (operator, consortium leader)</li> <li>• Bombardier Transportation GmbH (charging system and battery)</li> <li>• Solaris (project, manufacturing of the bus)</li> <li>• Technische Universität Berlin (system simulation, scientific studies, Hertzallee charging point)</li> <li>• Vossloh-Kiepe GmbH (drive, energy management)</li> </ul>

### About Solaris Bus & Coach

*Solaris Bus & Coach is a major European producer of city, intercity and special-purpose buses as well as low-floor trams. Since the start of production in 1996, over 12 000 vehicles have already left the factory in Bolechowo near Poznań. They are running in 29 countries. Despite its young age, Solaris has become one of the trendsetting companies in its industry. For many years it has been the indisputable leader among the suppliers of city buses in Poland as well as one of the largest suppliers of city buses in Germany.*

### For media enquiries, please contact:

Mateusz Figaszewski  
Deputy Director, Head of Public Relations  
[mateusz.figaszewski@solarisbus.com](mailto:mateusz.figaszewski@solarisbus.com)  
Mobile: +48 601 652 179

### Additional information

**Mateusz Figaszewski**  
E-mobility Development & Market Intelligence Director  
Tel.: +48 61 66 72 347  
Mobile: +48 601 652 179  
Fax: 48 61 66 72 345  
email: [mateusz.figaszewski@solarisbus.com](mailto:mateusz.figaszewski@solarisbus.com)

### About our company

Solaris Bus & Coach sp. z o.o. is one of the leading producers of city and intercity buses in Europe. It focuses in particular on the development of zero-emission vehicles, i. e. electric and hydrogen buses as well as trolleybuses. This has resulted in the widest zero-emission product range in the European market and a leading position in this segment with a market

share of 15.2%. Nearly 25,000 Solaris vehicles have been delivered so far and they ply the streets in 850 towns and cities across 33 countries located throughout Europe as well as beyond it. Solaris is part of the Spanish CAF Group (Construcciones y Auxiliar de Ferrocarriles) S.A. From conception, to the design and manufacturing phases, all Solaris buses are produced in Poland. Moreover, all activities undertaken by the manufacturer are in line with the brand's mission, which is reflected in the motto "We are changing the image of public transport". Solaris also actively partners with public transport operators and provides them with comprehensive support in their transition to zero-emission mobility.