ABB solutions for e-buses
Highlights worldwide

**Belgium – ABB to charge the largest single network of 101 electric buses in Europe**
In January 2017, ABB inaugurated the first two OppCharge bus charging stations to power eleven electric hybrid buses running within a new zero-emissions zone in the city center of Namur. The charging stations will fully charge the electric hybrid buses with 150 kW of charging power in three to six minutes during layover times at the bus route’s end points.

**Switzerland – TOSA e-bus enables breakthrough environmentally friendly commuting in Geneva**
ABB will deliver and deploy 13 flash-charging stations along an urban transit bus route, as well as three terminal and four depot feeding stations. This will be the world’s fastest flash-charging connection technology taking less than 1 second to connect the bus to the charging point. ABB will also provide the onboard drivetrain solution including traction and auxiliary converters, permanent magnet traction motors, roof-mounted battery units as well as the Energy Transfer System (ETS).

**Switzerland – ABB supplying drivetrain technology for the SwissTrolley Plus in Zurich**
The traction equipment for the “SwissTrolley Plus”, consisting of a bus converter and two permanent magnet motors, was supplied by ABB. These innovative components are characterized by the fact that they enable highly efficient operations in urban traffic, which is particularly important in battery-operated vehicles. At the moment, the “SwissTrolley Plus” is running on the streets of the city of Zurich.

**Luxembourg – ABB brings electric hybrid bus charging to Luxembourg City**
ABB has installed two fast-chargers for electric hybrid buses at Luxembourg City’s central station. The chargers are based on OppCharge, an open interface for the automated charging of electric buses from any manufacturer, and use a pantograph on the infrastructure to connect the bus to the charging point.
France – ABB will supply the French city of Nantes with its flash-charging technology
The 20 e-buses fleet will run on the Busway Bus Rapid Transit (Line 4) route connecting the historic center of Nantes with municipalities on the southern side of the river Loire. Each bus will carry 151 passengers and will be equipped with energy-efficient ABB drivetrain technology, comprising traction and auxiliary converters, permanent magnet traction motors, roof-mounted battery units and energy transfer systems. The buses are expected to be operational by the end of 2018.

Germany – ABB’S electric bus charger HVC 300P is ‘just the ticket’ for Göttinger Verkehrsbetriebe
At the end of the first quarter of 2018, ABB will supply one of its Heavy Vehicle Chargers (HVC) 300P for Göttinger Verkehrsbetriebe (GöVB), which provides public bus transport in the German university city of Göttingen, in Lower Saxony. The initiative forms part of GöVB’ and Göttingen’s ambitious plans to transform the city’s public transport system into a greener and more sustainable network, with a greater reliance on electrification.

United Kingdom – ABB fast charging technology in UK for first electric buses
ABB will supply three HVC 300P charging stations and an electricity substation for installation at a bus station serving Harrogate, a historic spa town in northern England. The contract is significant as it is the first electric bus project in the UK that will use OppCharge for ‘opportunity charging’, where buses are charged while they wait at the end point of the route at the bus station, which are equipped with fast-charging infrastructure at each end of the bus line.

Sweden – ABB providing two fast-chargers for electric buses in Östersund
The chargers are based on OppCharge, an open interface for the automated charging of electric buses from any manufacturer, and use a pantograph on the infrastructure to connect the bus to the charging point. With tests set to start in the final quarter of 2017, the two ABB HVC300P fast-chargers will charge six fully-electric Scania buses and will be built at both ends of the 14-kilometer major bus line. With 10-minute charging, the buses will run every 15 minutes, making 100 journeys each day.