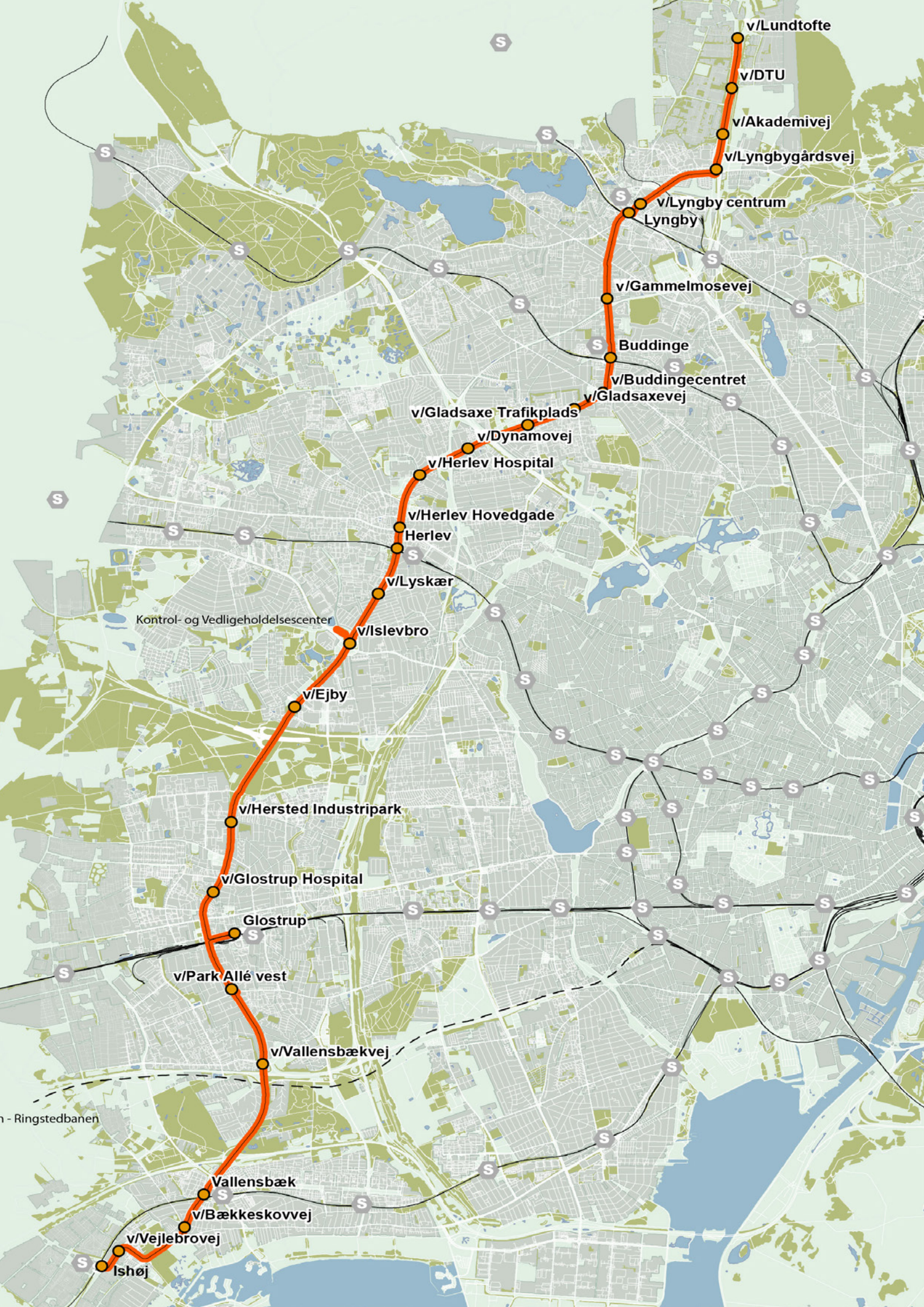
Report:

RING 3 LIGHT RAIL

March 2013 Summary

RINGBY/LIGHT RAILPARTNERSHIP


v/Lundtofte
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v/Gladsaxevej
v/Gladsaxe Trafikplads
v/Dynamovej
v/Herlev Hospital
v/Herlev Hovedgade
Herlev
v/Lyskær
Kontrol- og Vedligeholdelsescenter
v/Islevbro
v/Ejby
v/Hersted Industripark
v/Glostrup Hospital
Glostrup
v/Park Allé vest
v/Vallensbækvej
- Ringstedbanen
Vallensbæk
v/Bækkeskovvej
v/Vejlebrovej
Ishøj

1

RINGBYEN – FUTURE URBAN DEVELOPMENT

Light rails are now a familiar feature in the public transport systems in several major European cities. The key characteristics are high speed and frequent services.

A light rail on Ring 3– from Lundtofte in the north to Ishøj in the south – will be one of the first light rails to be built in Denmark. The light rail is intended to promote the use of public transport services and urban development in the Greater Copenhagen area and the 11 so-called "Ringby" municipalities: Lyngby-Taarbæk Kommune, Gladsaxe Kommune, Herlev Kommune, Albertslund Kommune, Rødovre Kommune, Glostrup Kommune, Brøndby Kommune, Hvidovre Kommune, Vallensbæk Kommune, Ishøj Kommune and Høje-Taastrup Kommune.

Since the Finger Plan - a plan to develop urban areas of the metropolitan region – was introduced 65 years ago, new transport needs have evolved. The 11 Ringby municipalities, the Capital Region of Denmark and the Danish state represented by the Danish Ministry of Transport have therefore agreed to work together in the Ringby Light Rail Partnership to map the potential for a light rail system on Ring 3 to connect these municipalities and form the basis for future growth in the Greater Copenhagen area.

NEW BACKBONE IN GREATER COPENHAGEN

The Ring 3 light rail will become a new backbone in the Greater Copenhagen area. It will create several new hubs including the stations at Glostrup, Herlev and Lyngby.

The new hubs will underpin other public transport plans in the Greater Copenhagen area including the metro line Cityringen which opens in 2018 and the national strategy which aims to develop new public transport hubs.

The light rail is a way to ease congestion issues in the Greater Copenhagen area. The light rail will change the transport infrastructure in the metropolitan area providing an easy means of transport between the new well-served hubs. Experience not only in Copenhagen but also in major cities abroad indicates that efficient public transport is a feasible alternative to cars for commuters dogged by road congestion.

The light rail will also create new areas close to the stations with significant urban development potential for the Ringby municipalities which, in time, will change the face of the Ringby towns.

REGIONAL GROWTH

The light rail will also help bring new growth to the region as citizens, employees and companies will be attracted to the region because it offers efficient public transport services and easy access to the regional rail system and connections to the city centre.

It is expected that a Ring 3 light rail will generate 10,000-20,000 jobs in the vicinity of the new stations because urban planning will direct growth to these areas.

27 STATIONS – 27 KILOMETRES

The Ring 3 light rail will have 27 stations on a 27-kilometre line. This means that passengers will have easy and fast access to workplaces, educational institutions, cultural and sports activities and shopping facilities in all 11 municipalities and fast access to regional and commuter railway services.

Frequent services at five-minute intervals on weekdays make the light rail an attractive public transport solution. The light rail is expected to carry 13-14 million passengers a

year. The passenger total may increase to 17-18 million, as the area gradually develops. In comparison, the train line Kystbanen carries 10 million passengers a year (2011).

The light rail will improve the quality of public transport and provide new traffic routes crossing the established "fingers" and an alternative to travelling by car. The light rail will also provide more eco-friendly transport in the Ringby area.

WHAT WILL IT COST?

The light rail will cost about DKK 3.9 billion to build including a 15% contingency reserve. The operating system will cost about DKK 1.3 billion including the purchase of trains, control and maintenance centre, etc.

It will take 7-8 years to build the light rail, which could therefore open in 2020 at the earliest.

This publication is a summary of the report "Udredning om Letbane på Ring 3" (Report on the Ring 3 Light Rail) the aim of which is to create a basis for a Principle Agreement between the parties in the Ring 3 Light Rail Partnership on the establishment of a light rail on Ring 3 including adoption of a construction act and preparation of an environmental impact assessment (EIA). The report has been prepared by the Ringby Light Rail Partnership. By way of an agreement reached in autumn 2011, Metroselskabet acts as administrative secretariat for this task. The full report is accessible in Danish at www.ringtre.dk.

ACKNOWLEDGEMENTS

Special thanks to Anker Lohman-Hansen, Aalborg University, Christian Wichman Matthiesen, University of Copenhagen, Otto Anker Nielsen, DTU Transport, Per Homann Jespersen, Roskilde University and Peter Hartoft-Nielsen, Danish Nature Agency for their participation on the report's Review Board, whose contribution was to verify the passenger prognoses and socio-economic calculations.

The light rail's southernmost station Ishøj will provide good connections to commuter train and bus services.

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WHAT IS A LIGHT RAILWAY?

The Ring 3 light rail is an electric train, which primarily runs segregated on-street. The Ring 3 light rail will be integrated into the road system and will most often be located parallel to existing roads. At junctions, the light railway will join mixed traffic.

The Ring 3 light rail will receive power from overhead lines suspended from masts. Like commuter and regional train services, each light rail train is operated by a train driver.

There are light rails in many European cities, e.g. in France and Germany. In Scandinavia there are light rail systems in Oslo, Bergen, Stockholm and Gothenburg.

In terms of its design expression, the Ring 3 light rail could resemble the light rail in Bergen while, traffic-wise, there will be similarities with the light rail in Stockholm.

THE LIGHT RAIL ROLLING STOCK

The rolling stock is 2.65 m wide, about 3.5 m high and about 35 m long. One vehicle will carry 200-230 passengers.

A total of 27 vehicles will operate on the line.

Passengers love the Stockholm light rail and new lines are being built.

The light rail will mostly run segregated on-street. As here, in Gladsaxe Kommune.

In terms of its design expression, the Ring 3 light rail could resemble the light rail in Bergen.

THE REGIONAL AUTHORITY AND THE MUNICIPALITIES INVOLVED

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LYNGBY-TAARBÆK KOMMUNE
Population: 53,000
Light rail stations at: Lundtofte, DTU, Akademivej, Lyngbygårdsvej, Lyngby Centre and Lyngby

GLADSAXE KOMMUNE
Population: 66,000
Light rail stations at: Gammelmosevej, Buddinge, Buddinge Centre, Gladsaxevej, Gladsaxe Trafikplads and Dynamovej

HERLEV KOMMUNE
Population: 27,000
Light rail stations at: Herlev Hospital, Herlev Hovedgade, Herlev and Lyskær

ALBERTSLUND KOMMUNE
Population: 28,800
Light rail stations at: Hersted Industripark (located in Glostrup Kommune but on the municipal border)

RØDOVRE KOMMUNE
Population: 37,000
Light rail stations at: Islevbro

GLOSTRUP KOMMUNE
Population: 21,000
Light rail stations at: Islevbro – control and maintenance centre, Ejby, Hersted Industripark, Glostrup Hospital and Glostrup

BRØNDBY KOMMUNE
Population: 34,000
Light rail stations at: Park Allé Vest and Vallensbækvej

HVIDOVRE KOMMUNE
Population: 51,000
Although the light rail will not go through the municipality, Hvidovre Kommune is taking part in the Ringby Light Rail Partnership

VALLENSBÆK KOMMUNE
Population: 15,000
Light rail stations at: Vallensbæk and Bækkeskovvej

ISHØJ KOMMUNE
Population: 21,000
Light rail stations at: Vejlebrovej and Ishøj

HØJE-TAASTRUP KOMMUNE
Population: 48,000
Although the light rail will not go through the municipality, Høje-Taastrup Kommune is taking part in the Ringby Light Rail Partnership

REGION HOVEDSTADEN (THE CAPITAL REGION OF DENMARK)
The light rail connection will traverse and therefore connect all parts of the region

THE FUTURE RAIL NETWORK IN THE GREATER COPENHAGEN AREA INCLUDING THE RING 3 LIGHT RAIL

BETTER **PUBLIC TRANSPORT** AND URBAN DEVELOPMENT

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The establishment of the Ring 3 light rail will achieve two general goals for the 11 Ringby municipalities and the region.

1 The light rail will improve public transport and thus make it easier to travel across the traditional urban "fingers".

2 The light rail will encourage urban development.

AN EXPANDED RAIL NETWORK

The Ring 3 light rail will create a line which cuts across all the commuter train lines. Consequently, public transport will become more attractive for the local population. People will be able to travel quickly between the Ringby municipalities and there will also be good connections to and from the city centre and the remainder of the rail network (both commuter and regional train services).

Glostrup, Lyngby, Buddinge, Herlev, Vallensbæk and Ishøj will become major new traffic hubs linking the light rail, bus, and regional and commuter train services.

OPERATIONS

The light rail will run without an official time schedule, i.e. like the Copenhagen Metro. With regular departures at five-minute intervals on Mondays to Saturdays and at ten-minute intervals during the evenings and on Sundays passengers will be assured fast transportation that interconnects with all the commuter train lines every day, from early morning to late evening.

Today the 300S bus line operates between Lundtofte and Ishøj at ten-minute intervals in the rush hour and every 20 minutes outside the rush hour.

LIGHT RAIL TRAVEL SPEED

High speed and frequent services will be key to the light rail. Travelling the full distance from Lundtofte in the north to Ishøj in the south will take about 55 minutes. Currently, the same distance takes 65 minutes by bus and in the rush hour it may take more than 70 minutes.

The light rail will travel at a maximum speed of 70 km per hour. The average speed will be about 30 km per hour including stops at stations and at traffic lights. In other cities where the light rail travels through urban areas in mixed traffic, it will normally travel only 17-20 km per hour on average. Today the buses on Ring 3 travel at an average of about 23 km per hour in the rush hour and slightly faster at other times of the day.

BICYCLE TRANSPORT

Like the Copenhagen Metro, the light rail trains will have so-called flex zones, i.e. areas reserved for prams and pushchairs, wheelchairs and bicycles. The specific design including the layout of the flex zones will be determined at a later stage.

GROWTH

The light rail will facilitate development which is more dense than today along Ring 3. With the light rail and efficient public transport services in the region it is expected that the light rail will contribute to the overall urban development of the Ringby area including a growing population amounting to 20,000-40,000 new residents.

10,000-20,000 new jobs are expected to be located in the Ringby area by 2032. Directly and indirectly, construction work is also expected to create jobs corresponding to 7,000 man-years in addition to about 250 permanent positions associated with light rail operations.

In the long term, potentially a total of 90,000-100,000 new jobs will be created in the 11 Ringby municipalities if the full development volume is exploited.

A light rail in Greater Copenhagen will encourage growth and improve green mobility. In other words, the light rail will contribute to greener transport in the Ringby municipalities.

The light rail is also expected to bring change to each individual Ringby town. The introduction of light rail stations will provide new urban streets and create transformation in the towns. There will be fewer cars and road traffic speed limits will be reduced in the towns. Consequently, the light rail will help reduce urban pollution and create a more attractive cityscape.

Lyngby station – Buddinge station: 7 minutes

Buddinge station – Herlev station: 11 minutes

Herlev station – Glostrup station: 13 minutes

Lyngby station – Glostrup station: 31 minutes

It will take about 55 minutes to travel from one end of the line to the other.

For commuters, the light rail will be an alternative to driving. Here, at Hersted Industripark (industrial park)

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CITY TRAFFIC

NEW PUBLIC TRANSPORT SYSTEM IN GREATER COPENHAGEN

The light rail is a new and important superior public transport system in the Greater Copenhagen area. It connects the Ringby municipalities along the north-south axis and all commuter and regional train lines to and from the centre of Copenhagen. The Ring 3 light rail will supplement the Finger Plan which has been the backbone of the public transport system in the area since the 1940s. The light rail will create a transport network with new, major traffic hubs which are easy to reach.

Almost half of the passengers will use the light rail in combination with other public transport modes. For this reason, the light rail and the new traffic hubs must be designed to create optimal conditions for transit between light rail, commuter, region and national train and bus services. This will be done in cooperation with DSB, Banedanmark and Movia. Bus lines will have to be changed and adapted to the light rail to ensure the best possible connection between public transport services.

MORE PASSENGERS IN PUBLIC TRANSPORT

Calculations indicate that, during a weekday (a 24-hour period) in 2020, the light rail will carry about 43,000 passengers and 46,000 passengers in 2032. The light rail will create public transport growth in Greater Copenhagen by 16,000 passengers in a weekday (24-hour period). This corresponds to almost 5 million more passengers using public transport every year.

About 7,000 daily journeys will be transferred to public transport. About 4,000 people travelling by car, 2,000 cyclists and about 1,000 pedestrians will switch to public transport. Each passenger is expected to travel an average of 5.5 km on the light rail.

The light rail is expected to carry 13-14 million passengers a year. The passenger total may increase to 17-18 million as the urban areas gradually develop.

EFFECT ON ROAD TRAFFIC

The light rail will bring about changes in road traffic. The light rail will affect the road network and consequently the road traffic during the construction period and operation.

Ring 3 is currently an important regional road connecting the Ringby municipalities. It crosses all major roads leading to the centre of Copenhagen. The road is currently a regional road on which speed limits vary from 50-80 km per hour.

In 2020, 43,000 passengers will use the light rail every day, and 4,000 people a day will switch from cars to the light rail.

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The light rail will transform many sections of the road into urban streets where speed limits will be reduced to 50 km per hour for road traffic. This will benefit cyclists and pedestrians. The new development areas will improve urban environments at the centre of the individual towns. As the light rail will be built on existing roadways it may be necessary to narrow the road which, in some cases, will entail reducing the speed limit for road vehicles.

It is calculated that road capacity will not be reduced as a result of reconstructing the road in connection with building the light rail. Road intersections will be reconstructed to accommodate both road traffic and light rail services. However, minor delays for road traffic and longer travel times will occur due to a reduced speed limit on certain sections of the road.

Even though Ring 3 will be affected by construction work during the construction phase road traffic will be maintained.

PEDESTRIANS

Pedestrians will also have to become accustomed to the light rail as they move about the urban landscape. Pedestrians will be able to cross the light rail perimeters at crossings, where special attention will be paid to pedestrian safety, e.g. traffic signals or so-called Z crossings which are specially designed to ensure that pedestrians automatically look in the direction of the trains.

FREQUENCY BETWEEN LUNDTOFTE AND ISHØJ

Interval between services (min):

	300S	The Light Rail
Rush hour	10	5
Daytime weekdays/Saturday	20	5
Evenings Sunday	20	10

Glostrup and Lyngby stations are expected to be the busiest on the light rail line. Glostrup station.

NO. OF PASSENGERS AT THE LIGHT RAIL'S LARGEST STATIONS

Passengers per 24-hour period (weekday)

Station	2020	2032
Glostrup Station	6,170	6,520
Lyngby Station	4,420	4,500
Herlev Station	3,630	4,020
Buddinge Station	3,150	3,440
Lyngby Centrum	2,390	2,380
Herlev Hovedgade	2,230	2,430

When the light rail is established it will enhance the role of Lyngby station as an important transport hub.

THE INFRASTRUCTURE 6

The light rail stations will have a common identity with a design that can be adapted to various surroundings

The light rail will use standard rolling stock. The use of thoroughly tried and tested trains and track systems reduces costs and guarantees that services will meet consumer demands for stable services.

The light rail will travel segregated on-street wherever possible parallel with the road, either in the middle or to one side. The light rail will join mixed traffic only at crossings and intersections to avoid the risk that the light rail is affected by road traffic congestion. This ensures better traffic safety and reduces the number of delays.

At Vallensbæk easy transit to commuter train services will be achieved by building the light rail station parallel to the road.

There is an exception: In Lyngby, where the space available is restricted on some sections of the road, southbound light rail trains will join mixed traffic.

STATIONS

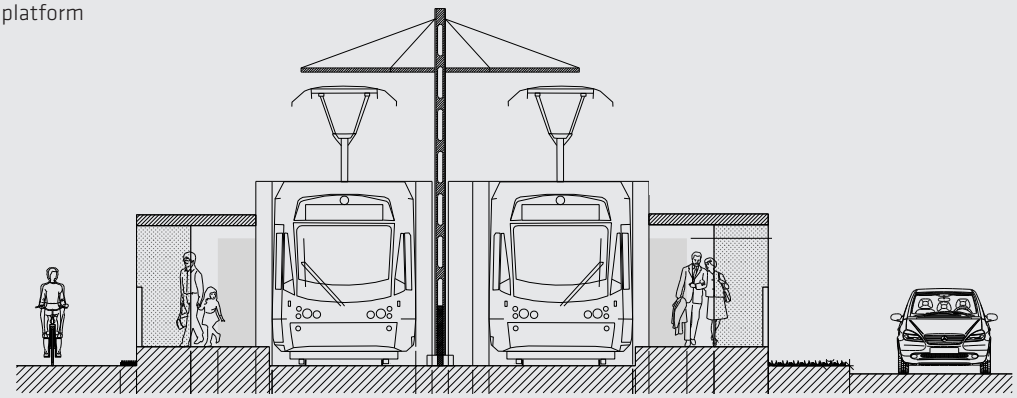
The light rail stations will be given a uniform identity so that passengers easily recognise them regardless of the stations' different surroundings. This will be achieved in a variety of ways, e.g. canopies, screens, material and choice of colours.

Platforms will be opposite one another for safety reasons and to make the individual station more compact, more obvious and visually easier to find. In most cases, the stations will have side platforms because these require less space than island platforms. In isolated cases, island platforms will be built.

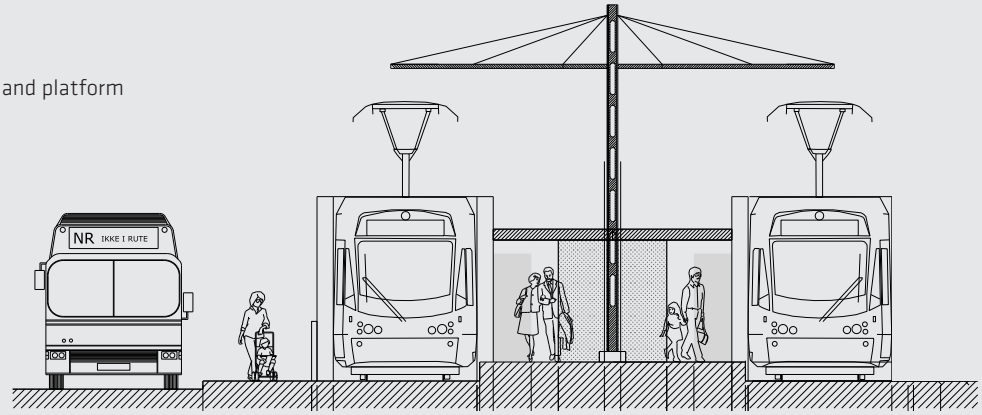
The stations will be located where opportunities are good for transit between light rail, train and bus services. The maximum walking distance between the different means of public transport will preferably not exceed 50 metres. Platforms will be 30-35 cm high and facilitate direct access to trains. Ramps will be provided for wheelchairs, prams and pushchairs. Windbreaks, traffic information and travel card equipment will be erected on the stations.

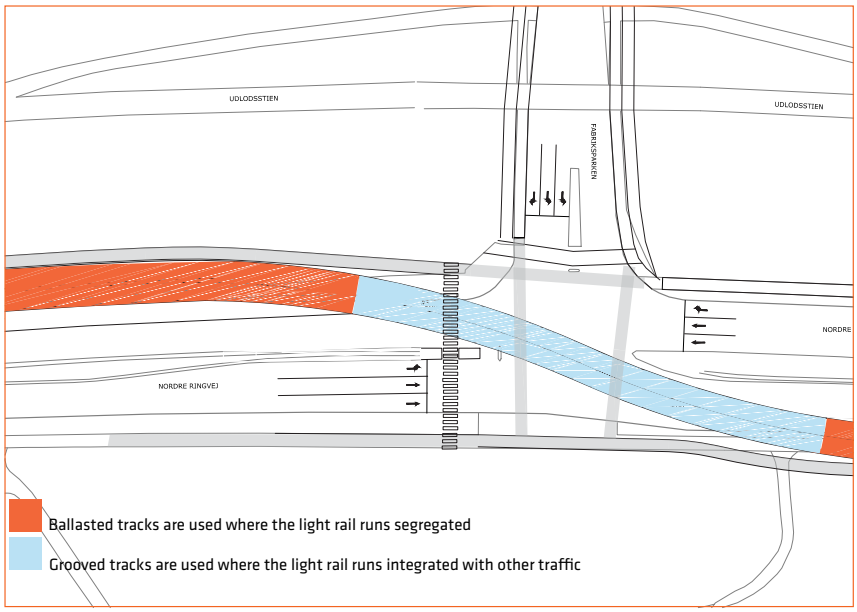
The figures show the two types of platform which will be used for the Ring 3 light rail.

Side platform



Island platform





The drawing shows that grooved tracks will be laid in places where vehicle traffic, bicycles or pedestrians cross the light rail track.

Top: Grooved tracks
Bottom: Ballasted tracks.

TYPE OF TRACK
Wherever the light rail travels integrated on-street, e.g. at road intersections, crossings, on plazas and pedestrian crossings, grooved rail profiles will be embedded into a concrete slab and the surface will be covered with either asphalt or paving stones. Grooved rail profiles will also be used on the few sections of road where the light rail shares the roadway with other traffic.

On sections of track where the light rail runs segregated on-street the solution of choice is ballasted tracks, i.e. with stone chippings under the tracks. Ballasted tracks are used on regular railway tracks and on many contemporary light rails.

CONTROL AND MAINTENANCE CENTRE
The light rail's control and maintenance centre is a central facility from which the light rail system is controlled and at which trains are cleaned and serviced. The centre will be located in Glostrup Kommune. At the centre, trains will be taken out of operation easily and quickly and redeployed after cleaning, maintenance or repair work is completed. The centre will create about 240 new jobs.

Substations will also be built. The light rail power supply system requires substations at about two-kilometre intervals. A substation converts alternating current to direct current. It covers an area of 75-100 m2.

RECONSTRUCTION AND MODIFICATION
The construction of the Ring 3 light rail will entail some changes to the existing road network. The light rail will cross all the

The entrance to the light rail's control and maintenance centre will be opposite Islevbro station at Rødovre.

motorways leading to central Copenhagen via either a bridge or a tunnel. The light rail will also pass about 60 intersections with traffic signals. Appropriate, safe crossings, new intersections with traffic signals, bridges and pedestrian crossings will be built.

The light rail will be given priority in traffic. Where possible, this will be achieved through traffic signal regulation. The needs of road traffic must also be considered so that there is a reasonable flow of traffic on Ring 3 and on side roads.

SAFETY

The light rail has to achieve the Danish Transport Authority's safety approval before being put into operation.

In Denmark, light rails are subject to the provisions of the Danish Railways Act although the act does not contain detailed provisions for light rails. The regulations governing safety approval generally will be the German BOStrab regulations. These are also applied to the light rail in Aarhus in addition to the Danish Transport Authority's executive orders and the CENELEC railway safety standards EN 50126. The regulations mean that the infrastructure and rolling stock must be risk-assessed and safety optimised before approval is given.

Furthermore, changes in the surrounding roadnet must also be approved by the road traffic authorities in accordance with road traffic legislation.

7 FINANCE

The light rail will cost approximately DKK 3.9 billion to build - including a 15 % contingency reserve. In addition, the operating system constitutes DKK 1.3 billion for the purchase of trains, control and maintenance facilities, etc.

The cost of each project element has been calculated on the basis of achieving the best solution in terms of system and safety also considering price. For example, standard train specifications have been selected as opposed to custom-designed trains and, wherever possible, ballasted tracks are preferred.

FUNDING

The funding of the construction of the light rail will be shared between the state (40 %) and municipalities (34 %) with additional funding from the Capital Region of Denmark (26 %).

It is envisaged that the cost of building the light rail will be financed through the Letbaneselskabet (the Light Rail Corporation), which will be responsible for light rail construction and operations. The Light Rail Corporation will be a commercial partnership, which can take up loans on the same terms and conditions as the owners.

It is assumed that payments from the state will be made according to a payment schedule which will be determined on establishment of the Light Rail Corporation.

With regard to the municipalities, they will make an initial payment of at least 15 % of their respective shares of the total cost of construction. This will be payable over a three-year period from the corporation's foundation date (2014-2016). The remainder of the municipalities' payments will be made after 2016 but within 40 years, i.e. in the period 2017-2056. Similarly, the Capital Region of Denmark's initial payment (the advance payment) will comprise at least 15 % of the region's total share and must be paid in full

The estimated cost of construction at 2013 price level – including 15 % contingency reserve (stated in DKK million)

Budget item	
Basic estimate	3,418
15 % contingency reserve	513
Total estimated cost of construction Including 15 % contingency reserve	3,931

Operational fixed asset investments

Budget item	
Operational fixed asset investments	1,339

by 2019. The region's remaining payments will be paid after 2019 but within 40 years, i.e. in the period 2020-2059.

It is further envisaged that payment of operational system investments will be made as part of payments to cover operational costs with passenger income offset. The Danish state will play no part in operational financing.

OPERATING INCOME

The light rail is expected to carry 13-14 million passengers a year developing to an anticipated passenger income of DKK 125-140 million a year (at 2013 prices).

Average income is based on expected ticket price development and appreciated to a rate of DKK 8.60 per passenger in 2020 and DKK 9.89 per passenger in 2032.

Commercial activities, primarily advertising, are expected to contribute about DKK 4 million each year.

OPERATING COSTS

The cost of running the light rail will be approximately DKK 162 million a year. Over and above these costs, operational system investments will also be required.

THE SOCIO-ECONOMIC SIGNIFICANCE OF THE LIGHT RAIL

Many of the benefits the light rail will bring are impossible to quantify using the method normally used to measure the socio-economic effects of a project. For example, no method exists by which to calculate the value of urban development potential and regional competitive capacity to which the light rail will make a strong contribution. Furthermore, the proposed reduction of speed limits on Ring 3 represents a significant socio-economic disadvantage of the light rail as road transit times will be prolonged as a consequence. As with many similar public transport projects, the socio-economic contribution made by the light rail is therefore negative. In a sensitivity analysis including a 15 % contingency reserve, passenger incomes with full-rate urban growth and no subtraction for reduced road speed limits, the socio-economic effects of the project are positive.

CLEANER ENVIRONMENT – FEWER VEHICLES

The light rail will encourage a switch from car transport to the light rail and therefore impact the climate and the environment positively. When the electric light railway replaces diesel-powered buses, local pollution levels will also be reduced.

During construction and under operation the light rail will impact the environment negatively. In the upcoming EIA report, the impact of noise and air pollution, amongst others, will be assessed.

Good, safe passenger crossings such as bridges and new regulated intersections will be built wherever the light rail crosses an existing road. As here, in Brøndby Kommune.

FUTURE TASKS

8

UTILITY DIVERSIONS

Before construction works can start, cables have to be diverted. Transverse cable systems such as electricity and telecommunication cables must be safeguarded or lowered to avoid substantial diversion. Gas, water and district heating pipes must be diverted outside the light railway perimeter. Agreements have to be signed with cable owners whose cables are affected by light rail construction. It is estimated (conservatively) that 25 % of the total cost of diverting cables will be paid by the light rail project.

ARCHAEOLOGY

The developer is legally required to make archaeological surveys in connection with earthworks and construction work. The light rail area is fully urbanised and archaeological interests along its sections have already been registered in connection with earlier construction projects. However, Kroppedal Museum has indicated some sites which may be of archaeological interest.

SITES AND EXPROPRIATION

The location of the light rail is planned in order to restrict expropriation to an absolute minimum. Certain sites and permits will, however, have to be acquired (either permanently or temporarily). Expropriation will be carried out in accordance with Danish expropriation legislation. An expropriation committee will be set up by the project for the purpose of carrying out expropriation and establishing compensation. Expropriations are expected to begin once the construction act is passed and the EIA procedure is completed.

ORGANISATION

A commercial partnership will be formed. This partnership will be responsible for the light rail construction and later for outsourcing operation and maintenance of the system. The 11 municipal authorities constitute a single partner in the partnership. The municipal authorities, the state and the Capital Region of Denmark will be responsible for construction of the light rail. When the light rail system is built and handed over to passenger operation, the state will withdraw from the partnership which will continue as a partnership between the municipalities and the Capital Region of Denmark.

In the initial phases, the partnership's board will comprise three representatives of the state, and two representatives from the Capital Region of Denmark and the municipalities, respectively. On state withdrawal, the municipalities and the Capital Region of Denmark will each have three representatives on the Board.

The organisation will be finalised as part of the upcoming Principle Agreement between the parties and associated legislation concerning the Ring 3 light rail.

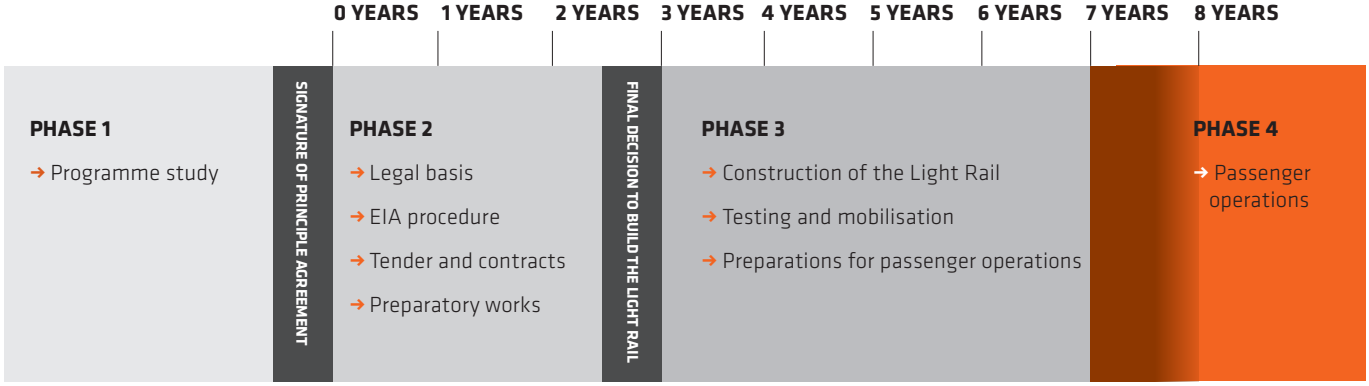
NEIGHBOURS

The light rail and construction work will affect many people. For this reason, it is imperative to establish a broad communication platform to inform citizens of the construction work. A coordinated effort between the municipalities and the region is required so that people living in the area feel that they are well-informed in all phases of the project from public hearings to the actual construction work.

A detailed communications strategy will be part of the next phase of the project.

SCHEDULE

Years after signing the Principle Agreement



→ 27 kilometres

→ 27 stations

→ Five-minute service during daytime

→ 13-14 million passengers a year in 2020

A Report on

RING 3 LIGHT RAIL

March 2013 Summary

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PREPARED BY:
The Ringby Light Rail Partnership
The Danish Ministry of Transport
Region Hovedstaden (the Capital Region of Denmark)
Lyngby-Taarbæk Kommune
Gladsaxe Kommune
Herlev Kommune
Rødovre Kommune
Glostrup Kommune
Albertslund Kommune
Brøndby Kommune
Hvidovre Kommune
Vallensbæk Kommune
Ishøj Kommune
Høje-Taastrup Kommune

Metroselskabet acts as administrative secretariat for the Ringby Light Rail Partnership.

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