Effects by the system for light transportation of goods in broad terms

The system for transportation of goods here presented consists of wagons with a loading capacity of preliminary 250 liters or 300 kilograms driven by direct electricity at a speed of 30 to 40 kilometers an hour. The wagon rolls in a culvert system dug down just beneath among others streets and pavements. It can also roll indoors when docking to a battery. The wagon follows bands, rolls on rubber wheels and usually rolls into house's cellars without needs of lifts.

The wagon is small enough to permit almost all working places and all households being directly connected to culvert and enough big permitting almost all goods that surrounds people being transported. Then it's also big enough in totally dominating extent permitting transports of loadings in light transports by car. This is the delimitation of the system.

1. Light transportation of goods by car on duty at very great extent disappears from streets and roads. These transports are executed in light lorries but also, and in fact at a larger extent, in personnel cars and primarily between working places. Transferable light transports from car to the system today costs estimated 26 billion dollars for a full scale system In Sweden, or 6 percent of GDP. Median weight for the goods likely is only 10 to 20 kilograms explained by the fact that transports of goods in personnel cars thus dominate. Industry's transportation needs will motivate a nationwide network, which follows along all streets and roads passing and connecting almost all workplaces. Cost of the system is dominated by the culvert net which, through small dimensions and cheap digging down just beneath streets and pavements, will be comparably low.

Total costs for the system can easily be financed when employers much cheaper and more environmentally friendly will choose buying light transportation of goods from the system rather than from car (also from own employees). In spite of low charges compared to costs for car, room exists for the exploiter to achieve extremely good profits on these transports. Therefore reduction of the car can be considered free for everyone.

2. Most of heavy transports by trucks on duty will disappear from the roads when they profitably will be replaced by combination transports between the system and ships or railway. The system's wagon rolls by own machinery fully automatically from the sender via culvert, up on a storehouse on quay close to a ship and along ramp up on the ship. Wagons can roll through lots of doors. Via a storehouse placed with long side some centimeters from a train that has arrived at the railway station the wagon can roll into railway carriages via lots of doors. A train with many carriages ought to be possible automatic to fill in its whole in just a few minutes and a ship probably in a few hours, see appendix 2, section 6 (only in Swedish).

Competitiveness of ship and rail transports increases sharply (also coastal and canal shipping) as result of extremely cheap connective transports by the system instead of by car and cheap loading and unloading. Also contributing to competiveness for ships and railway is that the wagon extremely cheap at own machine fully automatically will have the possibility to change from for example a railway carriage to a ship at a distance up to tenths of kilometers. A massive transfer of heavy trucking to combination transports between the system and ships or railway of this kind ought to be the case as total transport costs then will be much lower.

The system by this method also will be competitive compared with container transports.

3. A very large number of private transports of goods by car will disappear from streets and roads financed by the falling away needs of trade links. Wholesalers of among others everyday commodities will sell goods through the system directly to households. By the store no longer needed substantial price reductions on goods will occur. Shopping of daily goods today to 80 percent is done by car. Still greater is the price decreases when households can purchase goods directly from industry with two trade links getting superfluous.

The price cuts will be so great that it becomes profitable for households with few exceptions financing their own connection and the household's "share" of the bypassing culvert. In addition to households in block of flats this also will be true for households in residential districts almost without exception. Furthermore, much of rural population is concentrated close to roads where the culverts will be placed as result of requirements from industry as to above. Large proportion of rural households as result also should be connected. Households as result at own economic merits can be connected to culvert on a wide scale.

A big volume shopping trips for households will disappear. Note that household connection mainly is financed by other savings than in transports.

Points 1 - 3 above should lead to decreases in car traffic by 25 percent and in car fuels by 30 percent.

4. In industry enormous savings will be generated when the wagon can park next to the working chair for an assembler placing goods in the wagon one after another after completion. When the wagon is loaded the assembler sends away it by touching a button to an address free of choice. For example it can be done to an assembler in the next company in the refinement chain where it parks next to the assembler there on question. Please note that the goods immediately leave the company. As a result stockings of finished goods entirely will disappear. Stocks of inset goods decreases sharply when the goods continuously in small portions arrives at the next company. Even stockings in work will decrease when the wagon is used in logistics inside a company.

Half of the stockings, 50 billion dollars for a full scale system in Sweden, should be saved with annual savings including related costs according to a rule of thumb (50 percent of worth of the stockings) of 25 billion dollars. Savings at first will include 50 billion dollars now fettered that will be free, at second diminishing needs of own and loaned capital of 50 billion dollars, at third flexibility for industry will increase as time from fist production link for a product needing five production steps in my calculation today will need 21 months before attaining customer. At a halving of the stockings this time also will be halved. In four interest for capital binding of 50 billion dollars will disappear, in sixth wastage and unsaleable will diminish.

In addition, enormous savings inside companies will occur in handling and packing. Since handling, packaging, stockings and garage often are the most space demanding functions in companies, savings in locals becomes very large.

5. About 50 TWh/year distant heating should be produced by waste heat from linings of electricity, distant heating and outflow in Sweden when these linings are placed in own culverts in the same piece of concrete as the culvert system for the wagon. Insulation is placed around. Heating pipes will be cheaper building with new customers possible to connect.

6. A very large number of savings and other advantages are identified that can't be assigned to any of the above items or is result of the system as a whole. See the about 280 of the total more than 500 items for savings and other advantages attributable to this breaking through and listed on www.uvds.org , "Report", Table 12. These savings are given the number 6 in the parentheses preceding the text on each individual item.

7. A mere mathematical effect dramatically increases the value of the savings when these, as in this case, constitute a large share of GDP. If, with simple hypothetical figures, calculated savings in employment (resource input) is assumed to be 50 per cent of GDP but original production can be maintained unchanged, efficiency has already increased to 200 percent in the formula Resource inset x Productivity = Production (Before the increasing efficiency 1 x 1 = 1 and after 0.5 x 2 = 1). Increasing employment up till original 100 percent then results in an increase in output to 200 percent of the original (1 x 2 = 2). A savings of 50 percent of existing GDP thus enables a production increase of 100 percent at original resource inset.

If the production only would increase by 50 percent, unemployment would increase by 25 percent from its original level (0.75 x 2 = 1.50) to just over 30 percent in Sweden of today, a development of historical experience at rapid increases in productivity in society is improbable. Strong productivity growth in society usually combines with high employment, see for example Sweden and Germany during the 1950s - and the 1960s. Downward pressure on prices through rationalization enables low interest rates and an expansionary economic policy.

The difference between possible growth of output and savings as a share of current GDP, that is in the example, 50 percent of GDP, I have named for the revaluation factor. At an estimated savings of 41 percent of GDP by the system the revaluation factor amounts 140 billion dollars per year. It can be considered being a pure bonus.

The extreme high surplus from the goods transportation system I think will be used for financing infrastructure for an extremely costly high quality rail taxi system for personnel transportation

The goods transportation system ought to lead to so astronomical economic surplus that only the part falling on state and commune at unchanged tax rates in shorter time than 20 years can finance a high quality rail taxi system that on a wide scale replaces car for personnel transportation. Walking distance to the terminal should be less than 200 meters from nearly all workplaces and residences in the country, also a large part in rural districts. The systems together ought to reduce car traffic by about 90 percent corresponding to 62 TWh car fuels per year in Sweden of which 25 TWh assigning to the goods transportation system. Traffic in cities ought to diminish more and cities will be possible to build quite free from car traffic.

Energy savings and other environmental advantages will be great

In addition to energy savings in cars the goods distribution system through a variety of effects will reduce energy needs with net about 75 TWh per year, see the approximately 250 items with energy savings in said www.uvds.org, "Report", Table 12 (however only in Swedish). These items are there marked with the sign (¤) in the parenthesis before the text. Total energy savings as result will attain 100 TWh from the goods transportation system and 140 TWh if also a rail taxi system for personnel transportation is built.

As the system is about as good in other countries, similar effects ought to occur internationally.

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The system implementation has fallen into deadlock . Lack of opportunities for patent protection means that commercial entities could implement a system of this kind are rather opposed to it. The market for their existing products seeps up to almost nothing .

Important other operators in the area have probably assessed passenger transport of goods in the service that so few in number that they have no interest , why regular statistics do not cover these . It is also a signal to all stakeholders that these shipments have such a low volume that they are uninteresting . My own entrance into a profitable project was when I heard a traffic count before a flight schedule for Stockholm as saying that those journeys are gigantic volume . This meant that the project went from bad to extremely good profitability and that I subsequently was able to identify the above described additional six astronomical savings areas .

Furthermore, there are strong lockups in other individuals who consider themselves to be the losers of the system as well as a psychological dependence on the effects through the system may seem to be too good to almost be true , but it is . This combined with a basic concept that may seem too simple to not properly have been reviewed previously . These locks no connection with the question whether the system is worth to realize or not. Do not be fooled by them!

Help me for all the world to realize distributive system !

For more information, see www.uvds.org , first " article " about one page of text with 16 pages of comments describing the transmission of light goods transportation system , second " Presentation " on about 75 pages of text as more comprehensive description of the system . Thirdly, it describes the "Report " more thorough system effects which Table 12 shows the savings and including environmental benefits system should achieve.