One of the biggest political issues of the coming decades is the future of work. Technological advances are such that more than half of the existing jobs could be automated. Automation might create new jobs, but these will very likely not offset the lost jobs. This has far reaching consequences: uncorrected, automation will erode tax income, the welfare state and lead to very unequal income distribution. Some people say that automation requires the introduction of a basic income and a robot tax. Curiously enough, these issues are mostly absent from current political debate. Ports have been precursors in automated processes, but could ports also lead the debate on such innovative policy responses to automation?

PORT AUTOMATION

Ports have been pioneers of automation. Long before it became fashionable to speak about automated driving or autonomous trucks, various ports already had their driverless trucks – the automated guided vehicles. These automation processes, like other productivity enhancing developments, such as containerisation, brought employment losses that were dealt with more or less satisfactorily. Most of these transitions were facilitated by sustained trade growth or generous early retirement packages for redundant workers. Innovation is of all times, and many innovations have made workers redundant, but this has often liberated the work force to take up other work, often more rewarding work too. Times might be different now. Trade growth is stagnating and will probably never reach the levels of the last few decades. Simultaneously, robotisation could make more than half of current jobs disappear quickly. Terminal automation in such circumstances might have very different outcomes than in previous decades and result in the redundancy of people that are likely not to find another job again.

OFFSETTING SOCIAL COSTS

The business case for automated terminals is facilitated by governments that pick up the bill for the social costs. An important social cost is foregone tax revenues: robots do not pay taxes and do not consume, so they do not create economic growth. There is a limit to the absorption capacity of the state: who pays public services if the robots have taken over all the work? Who will buy the goods if humans have stopped to work? The crux here is that most people get income from work and that personal income tax revenues are generally higher than corporate tax revenues. The personal tax income lost due to the replacement of a worker by a machine is in many cases not compensated by higher corporate tax revenues. This is compounded by the fiscal optimisation strategies of multinational companies like global terminal operators.

THE ROBOT TAX

Not surprisingly, the literature on automation frequently suggests considering the introduction of a universal basic income, to be financed by some sort...
of tax on robots. A recent example of such a plea has come from no-one less than the current richest man in the world, Bill Gates.

Most ports are public bodies, so they need to look at impacts upon jobs. Local firms expect the port to be productive, local communities expect it to generate jobs, so any terminal automation project could raise concerns port authority concerns, as well as by port-cities and states. Why would it be in their interest to perpetuate a system that favours automation by taxing labour, but not taxing robots? The issue is delicate: we do not want to stifle innovation, yet there might be a real problem with the pace of acceleration with regard to port automation.

The discussion on the optimum outcome has started, but it has not gathered much momentum yet. The European Parliament has discussed a tax on robots, but it has as yet decided not to pursue it. The French presidential candidate Benoit Hamon proposed a universal basic income and a tax on robots, but his proposal barely received attention.

WHERE FROM HERE?
The situation seems to cry out for a visionary port director willing to consider pilot projects on the taxation of automation in port terminals. Such pilots would help to advance questions such as: ‘what to tax?’, ‘how to tax?’, ‘how to link tax to education and reconversion of workers?’, ‘should it be a temporary tax and whom to tax?’, and ‘should there be others rather than just terminal operators that could contribute to the mitigation of social costs?’ Ports were at the forefront of automation; could they now be the pioneers in exploring solutions to mitigate the social impacts of automation too?

ABOUT THE AUTHOR
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ABOUT THE ORGANISATION
The ITF at the OECD is an intergovernmental organisation with 57 member countries. It acts as a strategic think tank for Transport Policy and organises the Annual Summit of Ministers. The next summit will take place May 18-20, 2016 in Leipzig, Germany.

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