

Gerhard Bosch

HOW TO BETTER ALIGN SKILLS AND TRAINING SYSTEMS WITH CURRENT DEMANDS

OECD-DOL Workshop “Building effective local strategies to boost quality job creation, employment and participation”

Washington 18-19 November 2014

Prof. Dr. Gerhard Bosch

Universität Duisburg Essen

Institut Arbeit und Qualifikation

Forsthausweg 2, LE, 47057 Duisburg

Telefon: +49 (0)203 / 379-1827; **Fax:** +49 (0)203 / 379-1809

Email: gerhard.bosch@uni-due.de; www.iaq.uni-due.de

1.1 Transition from education to work in different VET and employment systems

Myriad studies:

- **Fast and stable transitions in countries with apprenticeship systems**
- **Difficult transitions in countries with school based VET and even more with general education systems**

Reasons:

- **Apprentices are employees not pupils – are represented by unions and works councillors – are „insiders“**
- **Social consensus to recruit apprentices – strong pressures from employer organizations, unions and the state**
- **High reputation of VET among employers and young people: Modernized occupations not second choice for poor school performers**
- **High scale – apprenticeship rate 6% in Germany**

1.2 Transition from education to work in different VET and employment systems

Tensions in the system - short term interest of companies to reduce costs vs. long-term interest to invest in a skilled work-force

- **Social consensus has to be continually re-build like in the financial crisis**

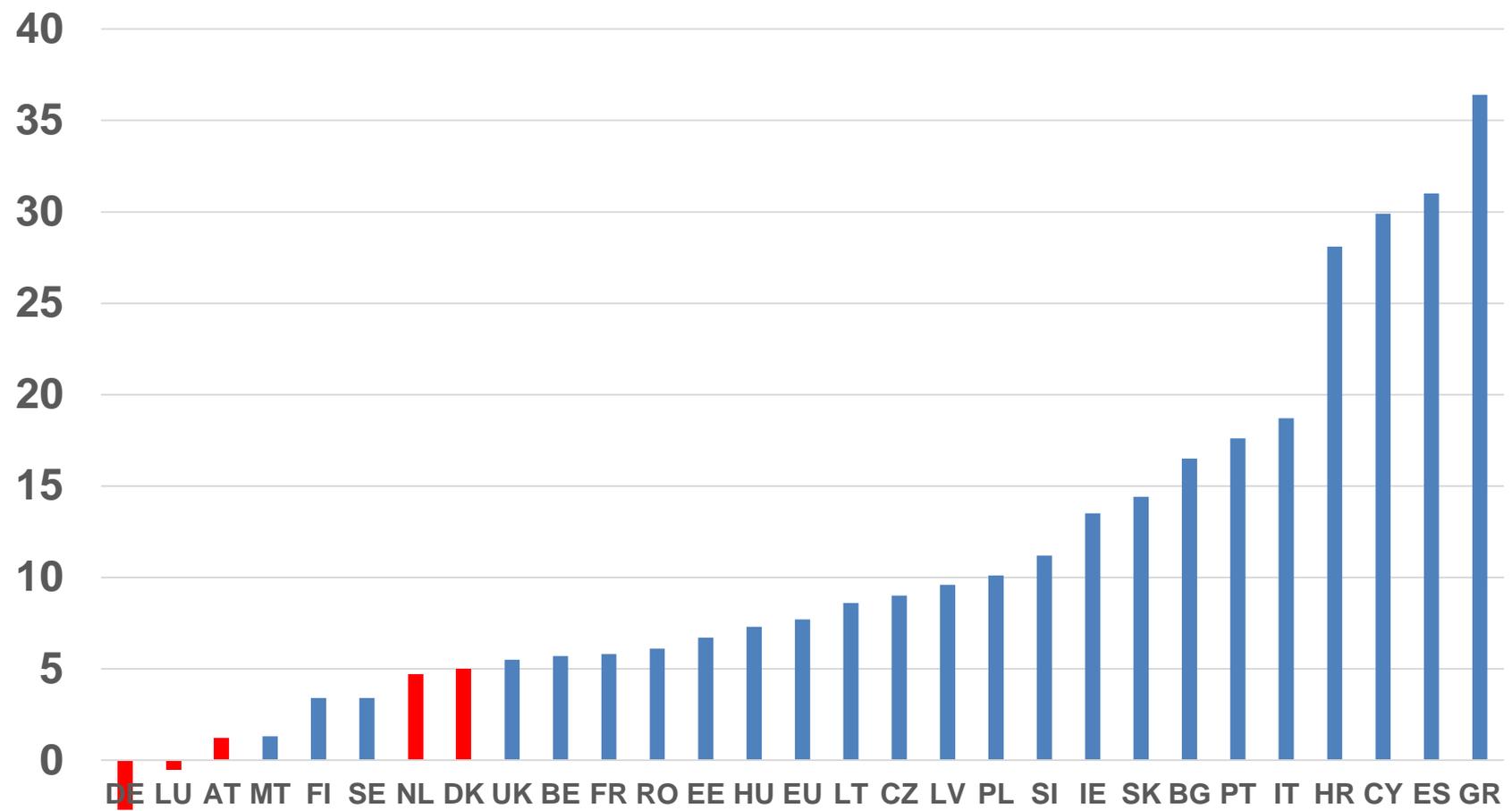
- **German employment miracle in 2009: reduction of GDP by 5% but (1) no increase of unemployment and (2) recruitment of 540 000 new apprentices because of**

- **work-sharing (temporary reductions of working hrs)**

- **national, regional, industry and company „training pacts“ on recruitment of apprentices**

Offen im Denken

1.3 No or low increase of youth unemployment rates (YURs) in countries with apprenticeship systems (*increase of YURs in the EU 2008 – 2013 in percentage points*)



Source: Eurostat 2014

2.1 Modernization of the German apprenticeship system

There is no such thing as clear employer's current skill „demands“ - high diversity of „demands“ depending on work organization, time horizon of planning, average tenure of employees, low road vs. high road strategies, products, regulations...

Basis decision for broad training in Germany: Goal of training: „Working and acting competently and autonomously in an occupation“ (*“Berufliche Handlungsfähigkeit”*)

Standardized national occupational profiles and curricula for around 360 occupations (2- 3,5 years of training) + promotional training curricula on bachelor level (Level 6 EQF) for all occupations (master, technicians, or business administrator)

- Social partners responsible for developing the occupational profiles and curricula
- they are „their occupations“ – crucial for acceptance

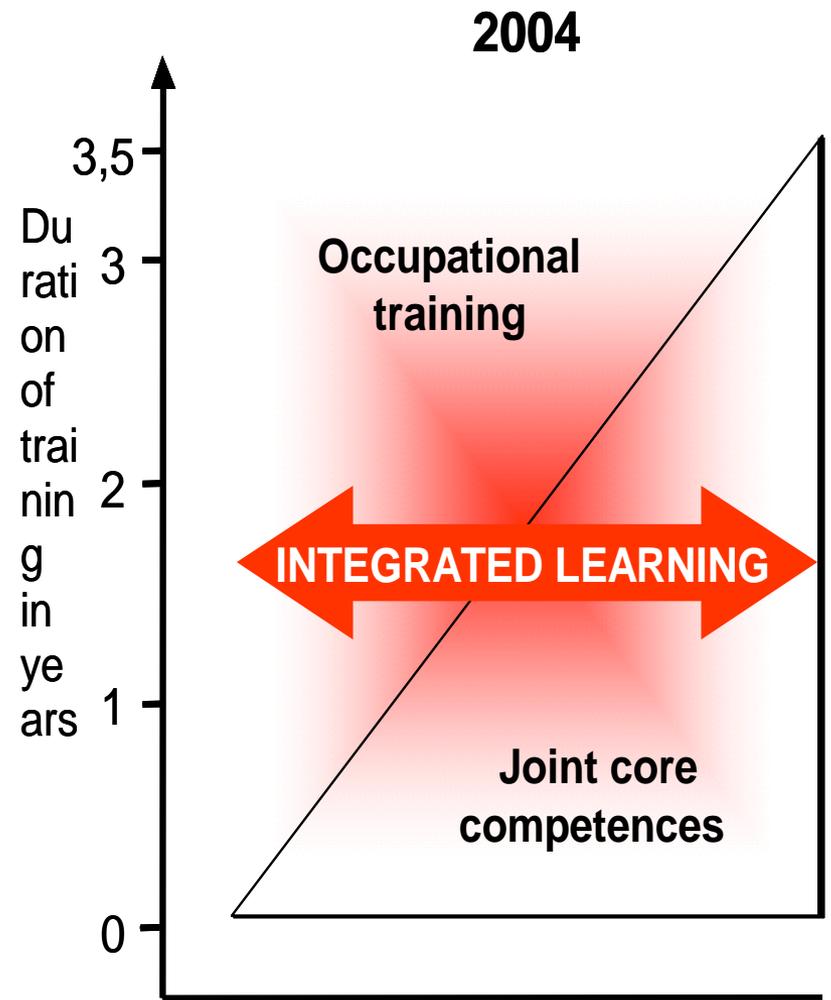
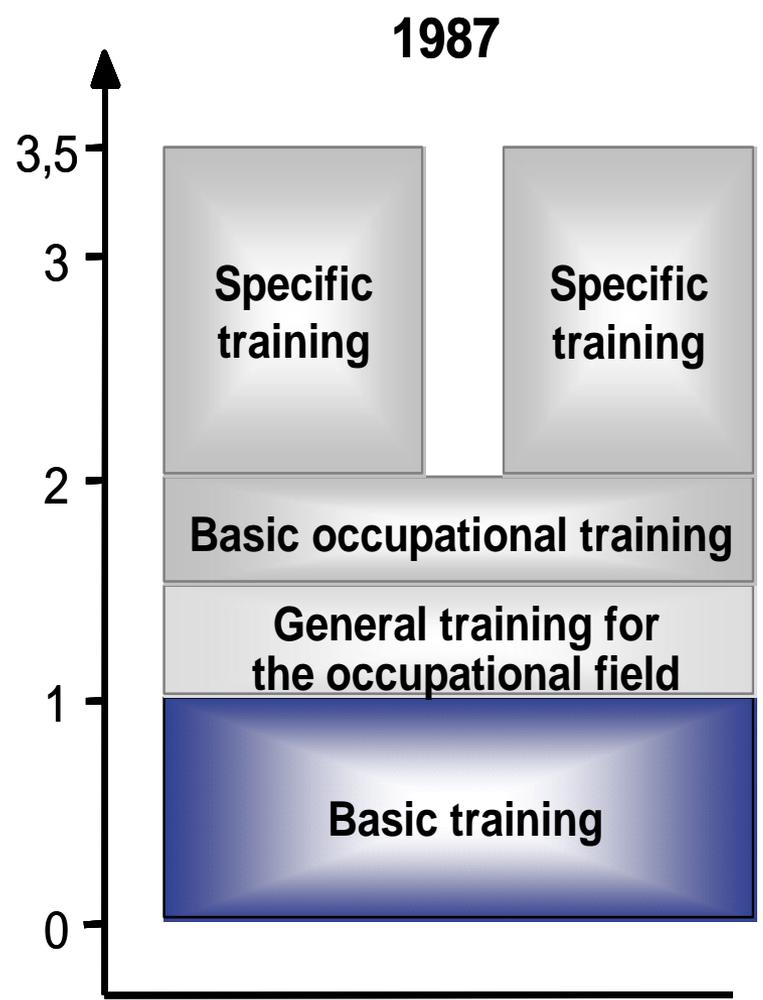
2.2 Modernization of the German apprenticeship system

System requires continuous pro-active modernization:

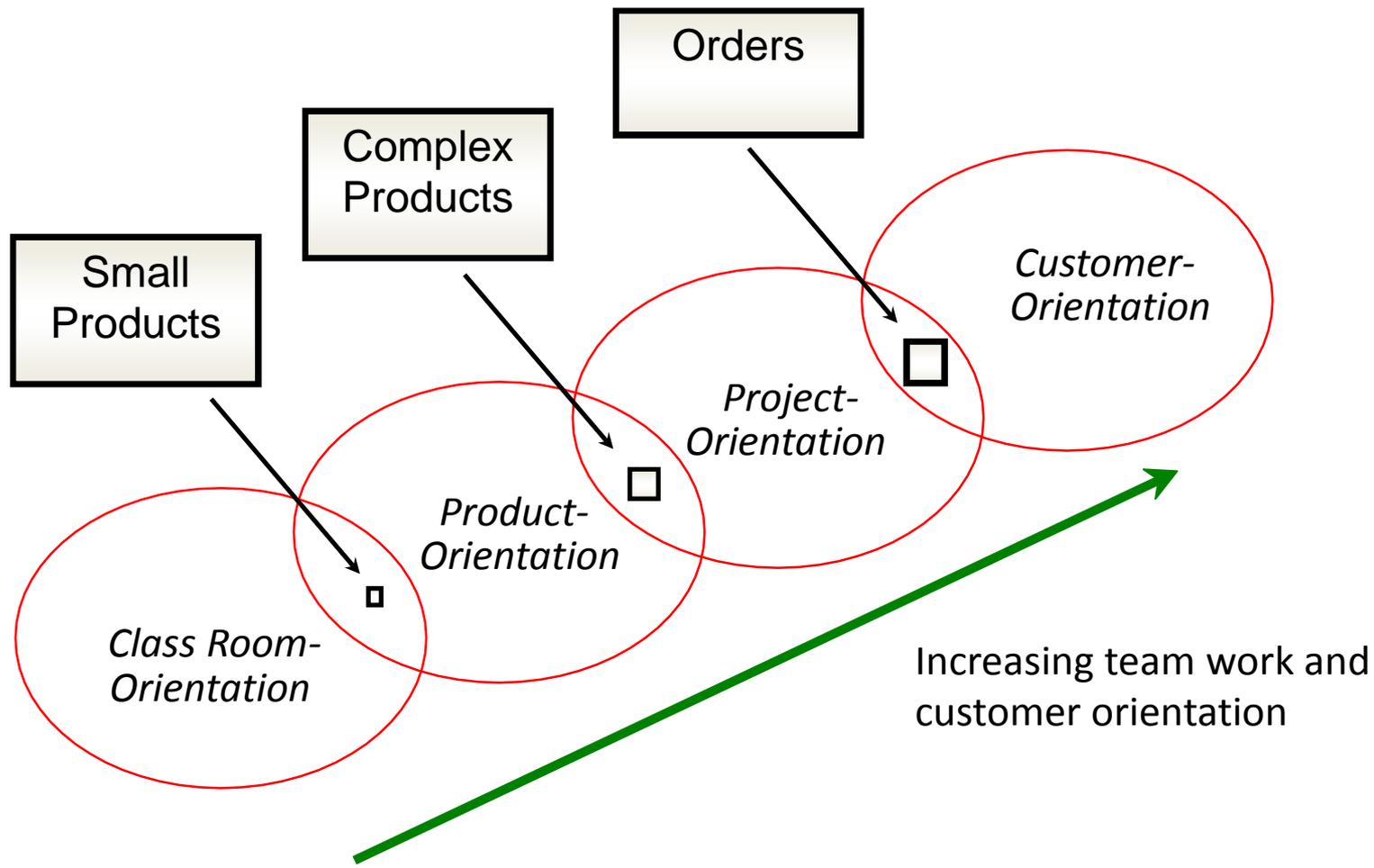
- early warning systems - analysis of new technologies and forms of work organization, training in most advanced companies, trends in further training....
- **Last two decades several waves of modernization:**
 - **Fast track** (6 months for modernization, 1 year new occupation)
 - **Increase of theoretical training** (two days in local vocational schools instead of one before)
 - **creation of broader occupations**
 - **New learning forms reflecting modern work organization** (team work, customer orientation)
- **Reforms always compromise between modern and traditional companies** – implementation of new curricula a challenge for traditional companies
- **Increasing importance of vocational schools and regional partnerships for SME's** – regional cooperation – boarding schools for some occupations

Offen im Denken

2.3 Example: Training curricula in the German metalworking trades 1987 and 2004 (1987 - 45, 1987 - 16, 2004 – 5 occupations)



2.4 New learning forms: From product towards team work and customer-or business process orientation



3.1 Outcomes of broad apprenticeship training

1. Fast transition from education to work

2. Decentralization of work organization: delegation of task, flatter hierarchies – Examples:

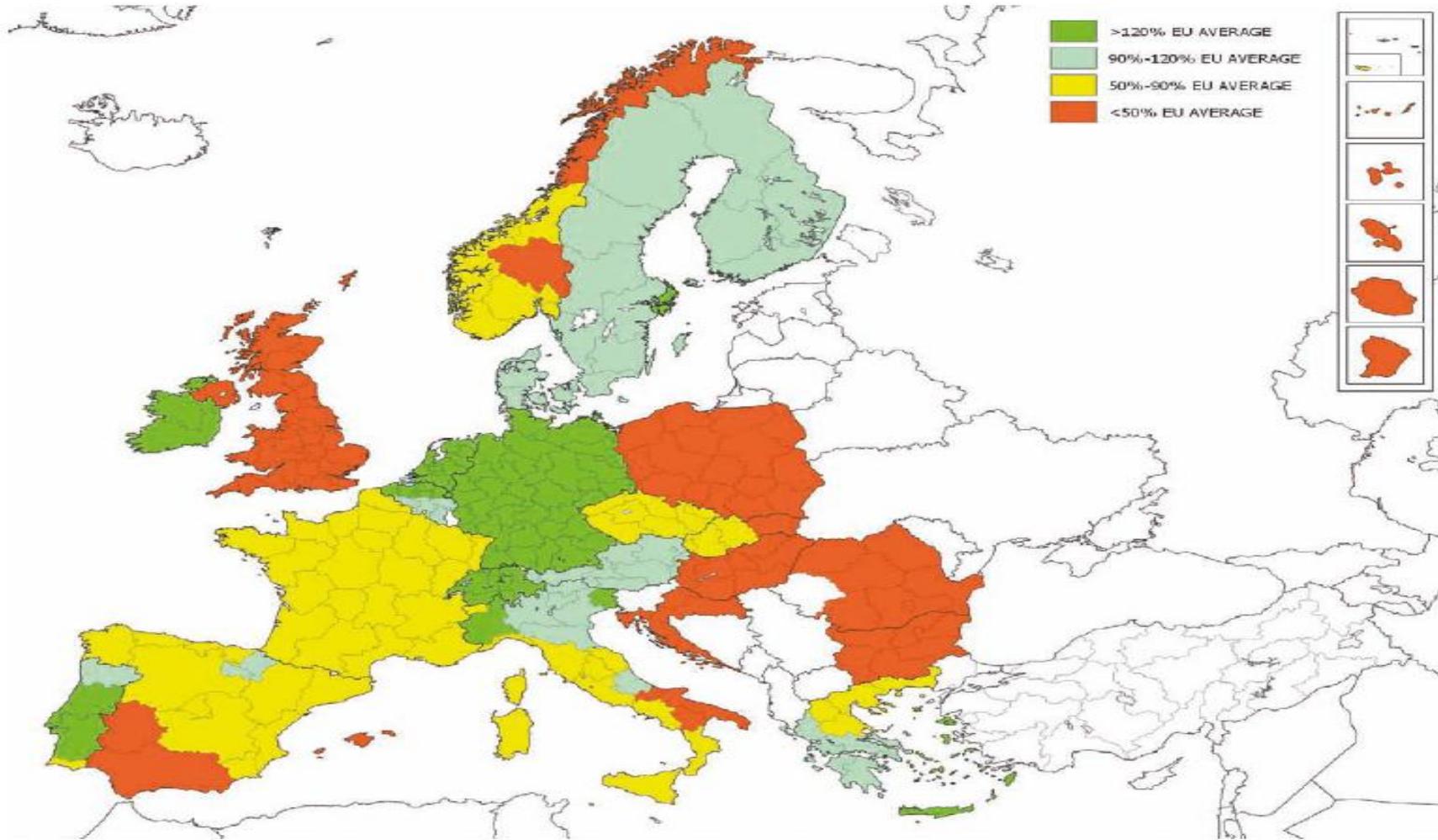
- share of bottom-layer management 4% in German compared to 11% in British machine-tool companies (Ryan et. al 2011)
- sales staff take on typical management responsibilities like ordering stock in countries with broader training (DE, NL, DK) than in countries with on-the-job training (UK, USA) (Carreé et. al 2010)

3. Better communication flow between shop floor and management especially if middle managers are recruited from below

4. Specialisation in products and services of higher value

5. Faster dissemination of innovations into SME's – SME's do not have specialized R&D-departments – innovations mainly through skilled people

3.2 SME` introducing product and process-innovation 2010 as % of SME`s



Quelle: European Commission (2014): Regional Innovation Scoreboard, p. 59.

Conclusions

- 1. VET may last up to 3,5 years – therefore important not alignment with current but with future skill demands**
- 2. VET should prepare for a whole work life including LLL not just for the present job – broad skills necessary**
- 3. High supply of broadly skilled employees encourages innovation and the introduction of decentralized forms of work organization**
- 4. Apprenticeship systems not easy to copy – especially from countries with weak unions**
 - But possibilities to introduce elements:**
 - Levy systems (like in DK or in US in construction in some states)**
 - Licensing**
 - Regional partnerships, networks of companies or training partnerships of big company with suppliers**
 - Public subsidies like in UK**
 - Strong public sector commitment like in London**

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