

# Romania an alternative to Asia

**Steve Driver**

CEO: SCL PCB Solutions Group

Spirit Circuits Limited

Lyncolec Limited

Stickleback Manufacturing Limited

# EIPC Winter Conference Dresden 2016

Future Automotive Electronics  
providing European high reliability  
solutions

## My Story

At the request of the **EIPC** I am giving this paper to share our plans and progress in **Romania**

# My discoveries

Why we need a low cost base factory

Why we have selected Romania

Due-diligence process

Culture

Labour market and pay rates

Universities

EU Funding

Utility and land costs

Who is already there

Some fun facts

Experiences

# It all started with an IOD introduction to BRIDGE

Grant Harrison IOD  
Calin Huma Bridge

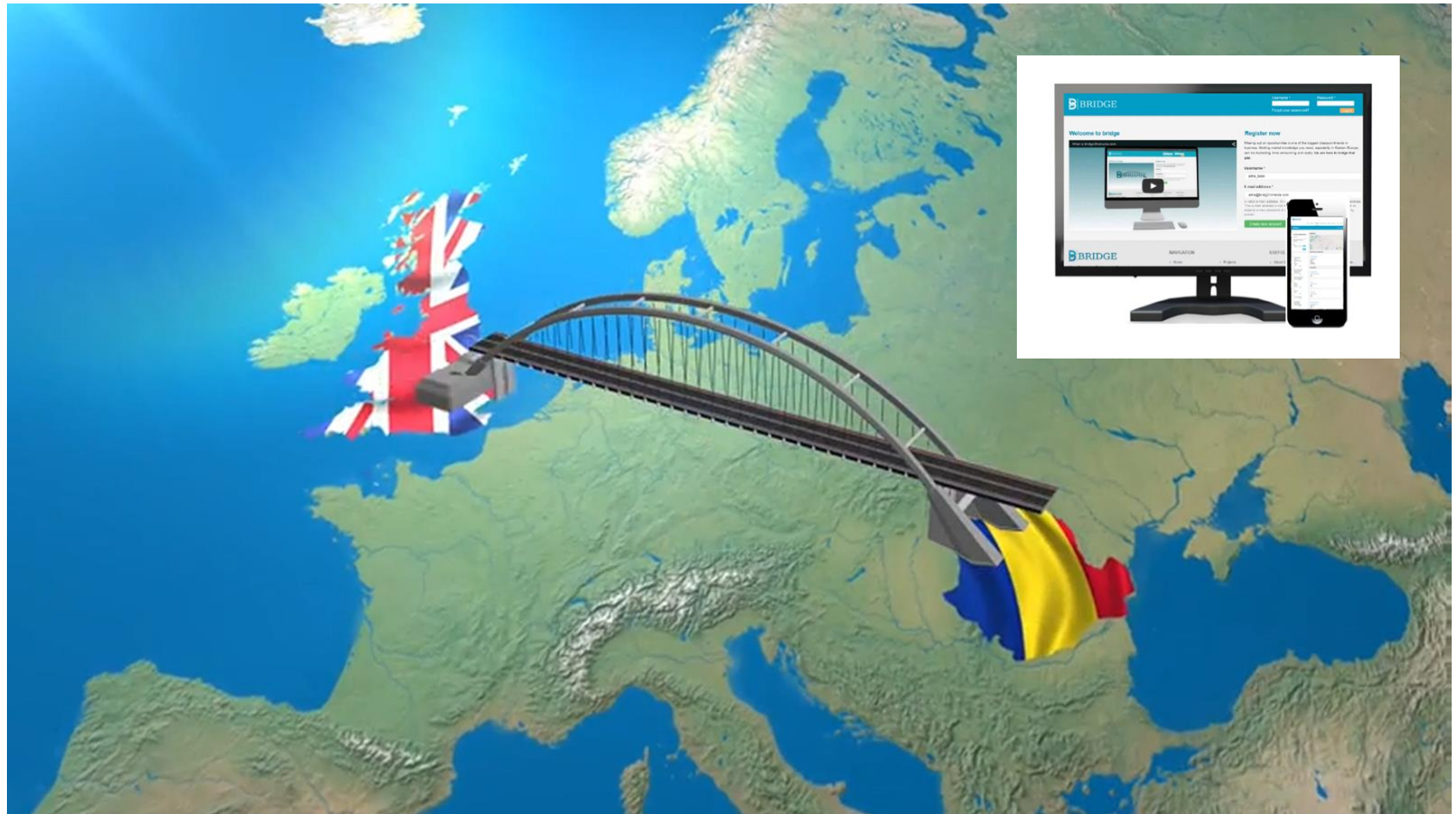
Mayors Office Craiova





# British Romanian International Development Gateway Exchange

[www.bridge2romania.com](http://www.bridge2romania.com)



# Romania





## Romanian delegation visit Spirit Circuits





# Letter of Intent signed with the Mayor



Letter of Intent  
Between  
**Spirit Circuits Ltd**  
and  
**City of Craiova**  
and  
**Industrial Park Craiova**



## Where

**Spirit Circuits Ltd**, a company based in Aston Road, Waterkloofville, Hampshire PO7 7XJ, UK, represented by **Mr Steve Driver MD**, following a comprehensive due diligence process, intends to open a production facility and create a Centre of Excellence in Craiova for the complex research, design and manufacture of Printed Board and Integrated Circuits within the perimeter of the Industrial Park Craiova.

## And

The **City of Craiova**, Strada Alexandru Ioan Cuza 7, Craiova 200585, Romania, represented by **Madame Mayor Olguta Vasilescu** together with the **Industrial Park Craiova**, Strada Aviatorilor 10, 207290, Romania, represented by **Mr Nicolai Marin MD**, will grant their institutional support, assistance and know-how for Spirit Circuits to be successful in the implementation of their development plans and help them make good use of the facilities granted to investors by the local, regional and national authorities.

*This Letter of Intent will commence its effects after being approved by the Craiova's Municipal Council.*

Signed today **21st May 2016** in Winchester, UK, in the presence of their excellencies **Paul Brummell**, British Ambassador to Romania, **Ioan Jinga**, Romanian Ambassador to the UK, **Keith Mans**, Deputy Leader of Hampshire County Council and **Nelu Prioteasa**, Leader of Dolj County Council.

City of Craiova

**Olguta Vasilescu Mayor**

Spirit Circuits

**Steve Driver Managing Director**

Industrial Park

**Nicolai Marin Managing Director**

Witness by

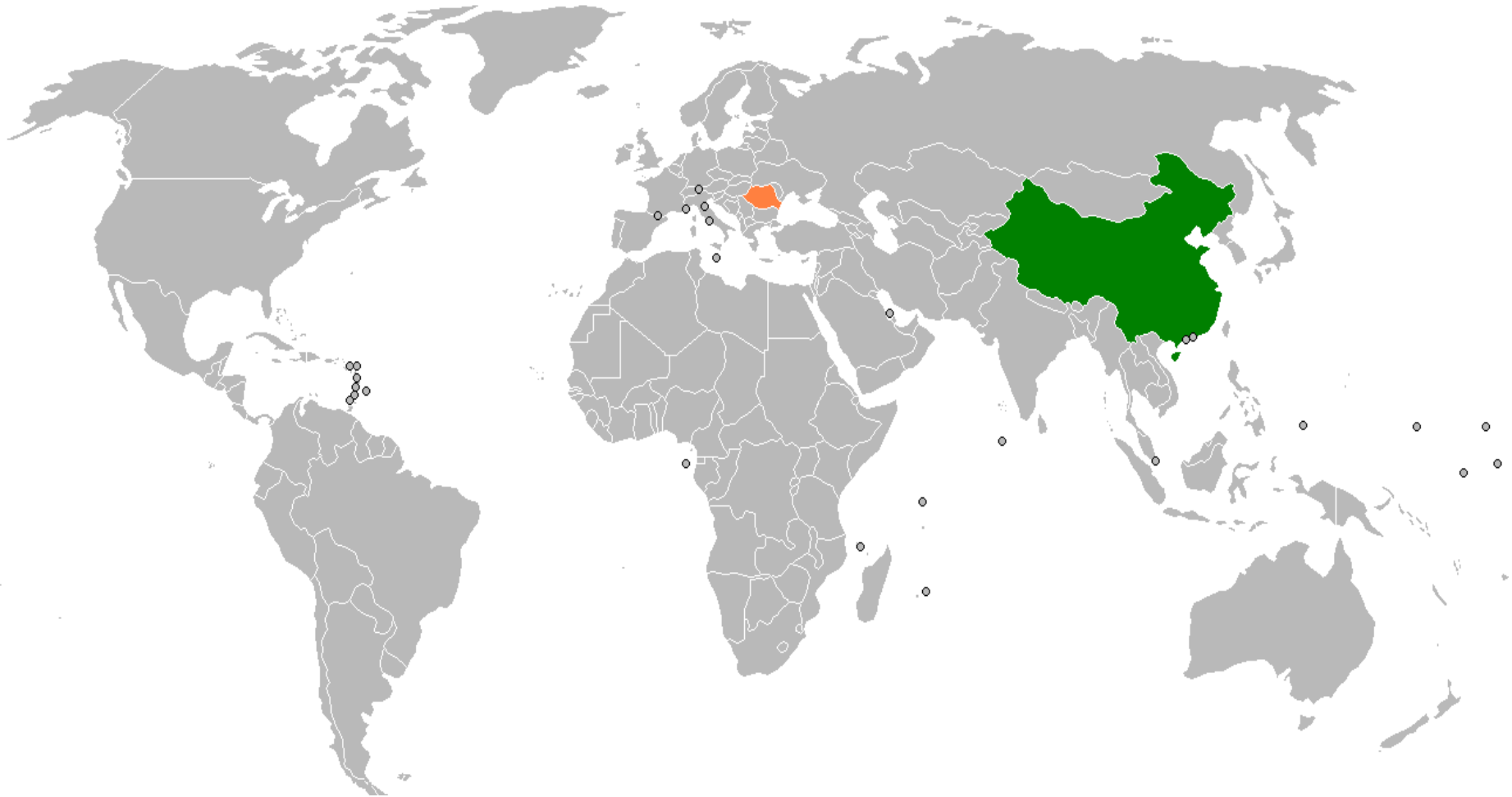
**Chin Huma** of Chief Executive of **BRIDGE**

**Stewart Dunn**, Chief Executive of the **Hampshire Chamber of Commerce**



The name "**Romania**" comes from the Latin word  
"Romanus" which means  
"**citizen of the Roman Empire**"

## Romania a low cost alternative to Asia



## China

- Undisputedly the work shop of the world
- We will probably always need it
- Not everything can be re-shored
- Air freight is expensive
- Sea freight is slow
- Needs constant management
- Changing fast
- Costs are increasing



## Low cost global footprint by location

### Manufacturing and Supply Sources

#### Europe

Czech Republic  
Estonia  
Hungary  
Poland  
Romania  
Slovakia  
Turkey

#### Asia

Philippines  
China  
Korea  
Taiwan  
Thailand

#### South America

Brazil  
Argentina  
Honduras



# Why Romania?

## Why Craiova?



# Prince Charles



## Romania some facts

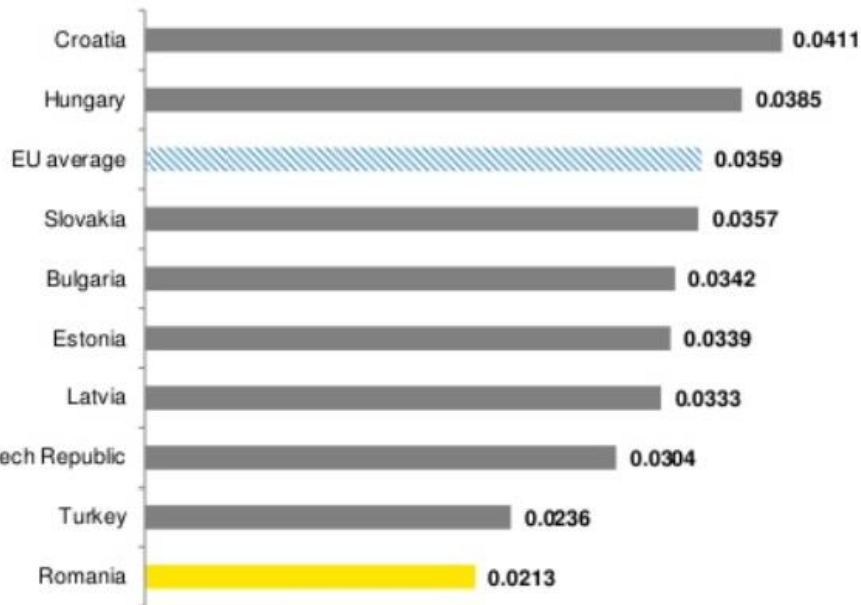
- Largest of the Balkan countries
- Population 21m
- Romania, a slower developer than other former communist countries of eastern Europe, took a major step away from its past when it was one of seven countries to join NATO in late March 2004
- Joined the EU in 2007
- Romania was hit hard in the 2008 Financial crisis. Recovery has been slow with harsh austerity measures taken by government and a 20bn IMF bailout. The largest bailout given.



# Romania has one of the most competitive manufacturing costs from EU

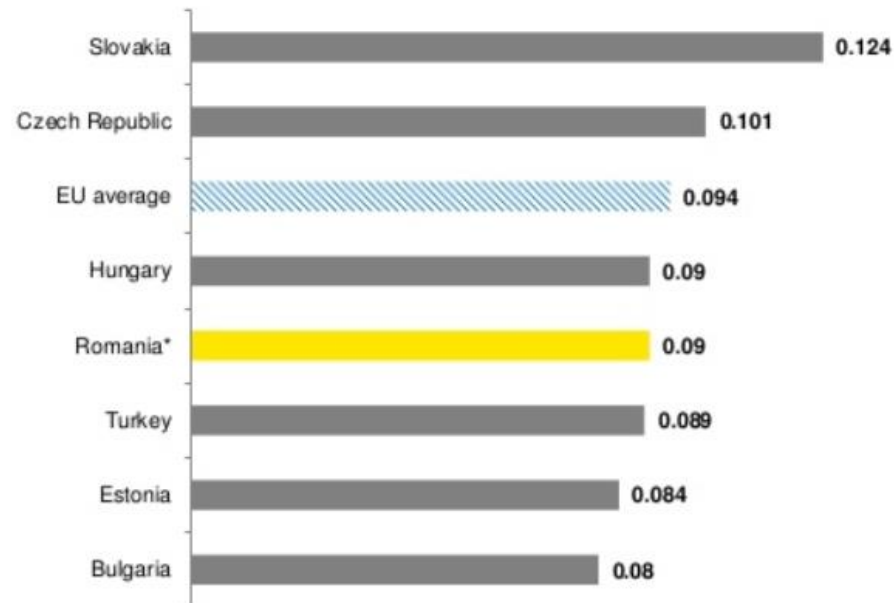
Gas prices for industrial users in Europe

€/Gigajoule, 2014



Electricity prices for industrial users in Europe

€/kWh, 2013

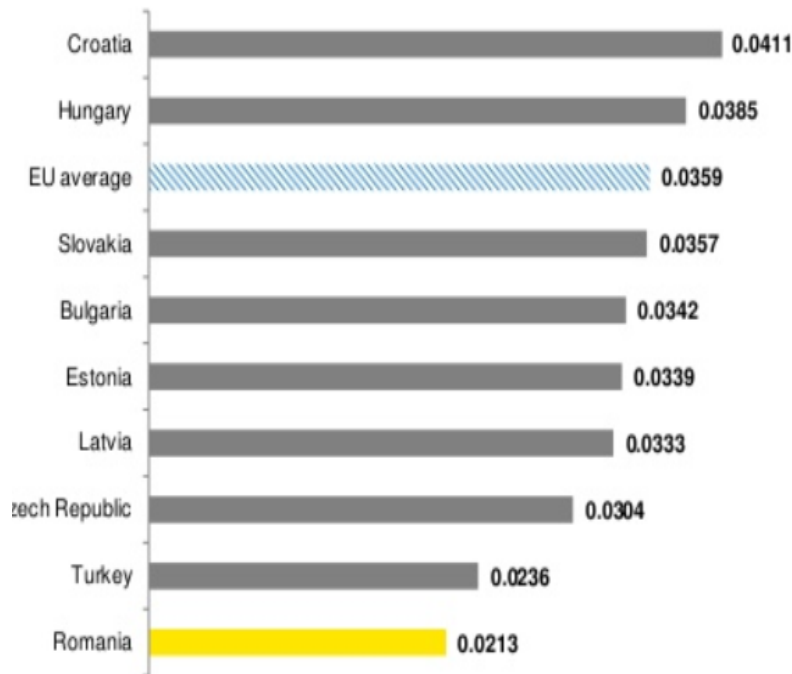


Source: Eurostat

# Romania has one of the most competitive manufacturing costs from EU

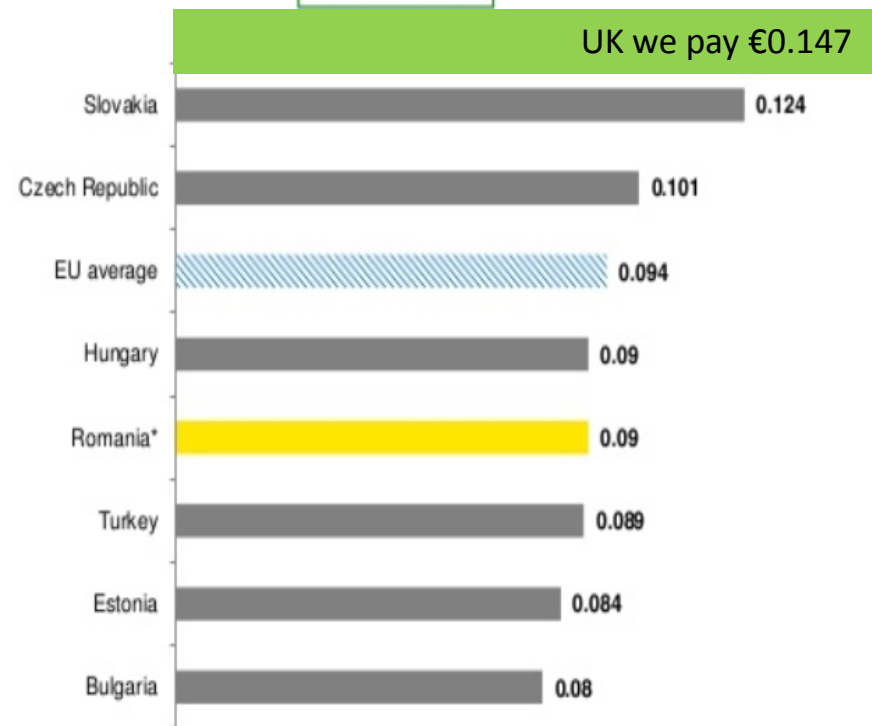
Gas prices for industrial users in Europe

€/Gigajoule, 2014



Electricity prices for industrial users in Europe

€/kWh, 2013



Source: Eurostat

## Why Romania?

- Very strong position (Centre of three important pan-European corridors with access to the Black Sea and Asia)
- Cost-effective alternative
- An expanding economy
- The working-age population in Romania tends to be very well-educated with strong foreign language skills more than **50,000 specialists** in engineering
- Good support from local government and universities
- A willing and available work force

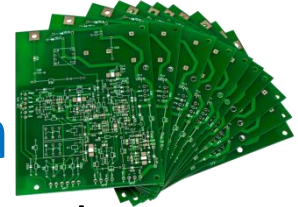


## Why Romania?

- **Low tax burden**; complex system of tax incentives corporate income and capital gains taxes at 16% and value-added tax (VAT) at 20%.
- EU Cohesion Policy funding **23 billion EUR** endowment, available for the period of 2014 to 2020
- Access to EU Funds, **Horizont 2020**, Regional Operational Program (**ROP**), Operational Programme Competitiveness (**OPC**), Human Capital Operational Programme (**HCOP**)
- Low Labor rates 250 euro per month
- Low rents
- Low Energy costs 5 euro cents /Kwhr



# Why are we moving production to a low cost base country for PCB production



- Spirit Circuits manufacture PCBs in the 1 – 6 layer technology range which tend to be more price sensitive
- We have a dominance in the LED sector and have a high demand for S/S PCBs
- China costs are increasing everywhere, hotels, salaries, food
- There is a reluctance in China to supply S/S PCBs
- We have failed to get the quality we want from India
- To be competitive we need to use sea freight from China adding 5 weeks to the lead time
- Our customers are all in Europe
- Real estate, utilities and labour are too expensive in the UK
- Constantly threatened by changes beyond our control when trading in China

# Good Wine



## Key facts about education in Romania

- ▶ 590 faculties from 103 universities, colleges and higher schools (5 polytechnic universities)
- ▶ 433,000 Romanian students
- ▶ 140,000 graduates every year, of which 7,800 from IT&C specialties
- ▶ App. 25% of the population are university degrees
- ▶ 15.1% of the graduates has engineering degrees
- ▶ English language studied by  $\approx 90\%$  of students
- ▶ Foreign languages spoken in business: English, French, German, Spanish, Italian



Source: National Institute of Statistics



## Chamber of Commerce





Romania is  
promoted heavily  
in the UK



**BRCC**

British Romanian  
Chamber of Commerce

in partnership with



**UK Trade  
& Investment**



British  
Chambers of  
Commerce

## Webinar: IT&C Business Opportunities in Romania

for UK SMEs | Save the date: 11 February 2016



Hi there!

Are you considering expanding overseas to find new export markets, outsourcing partners or attractive R&D locations? Consider Romania, with an estimated EUR 3bn IT&C market in 2016.

Romania is the second largest market in Central Eastern Europe after Poland, it has the fastest internet connection in Europe and 5th in the world. Cluj Napoca in the North is considered one of Eastern Europe's most vibrant tech hubs, with many international players, among which British company Endava, setting up development centres there.

UK companies in Information Technology and Communication are invited to learn more about the amazing opportunities Romania has to offer in terms of new business and investment.

## BBC News

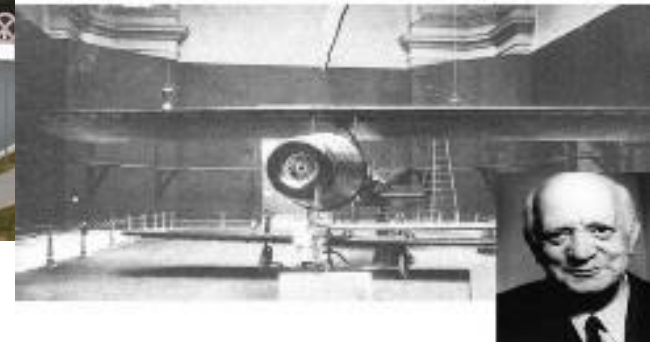


# Transport





**The jet engine used by modern airplanes**  
was invented by Bucharest-born Henri Coandă inventor and aerodynamics pioneer, Henri Coandă designed and built in 1910 the world's first jet powered aircraft, known as the Coandă



# Transport Today





# Costs of freight by air

Typically €3/Kg



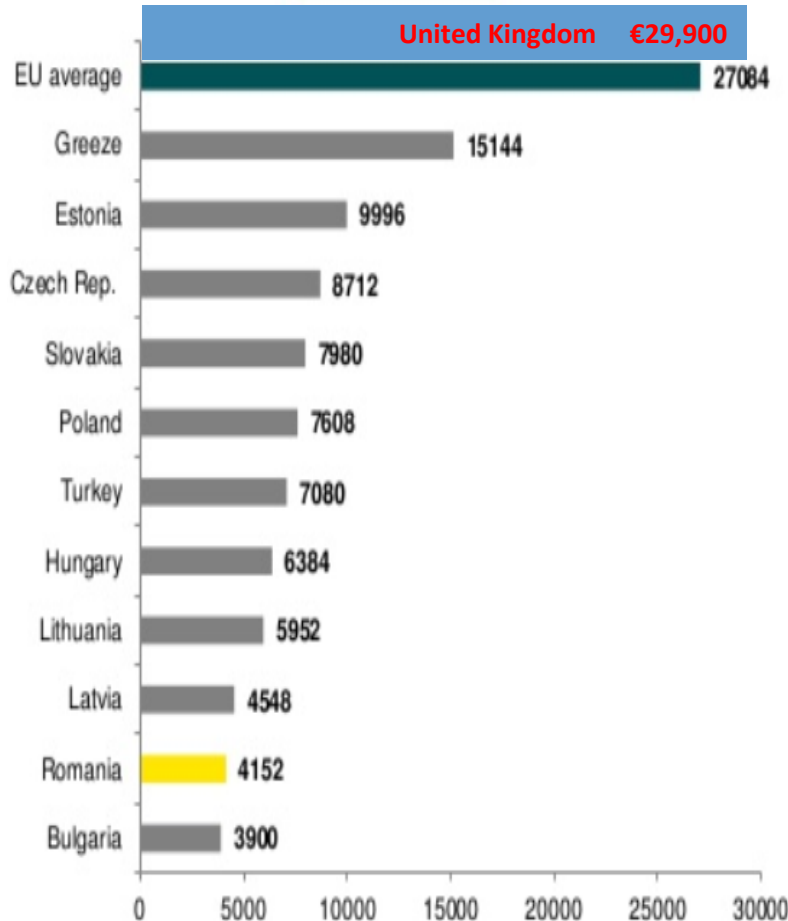
We spent €840,000 in 2015

# Labour costs

# Net annual salaries

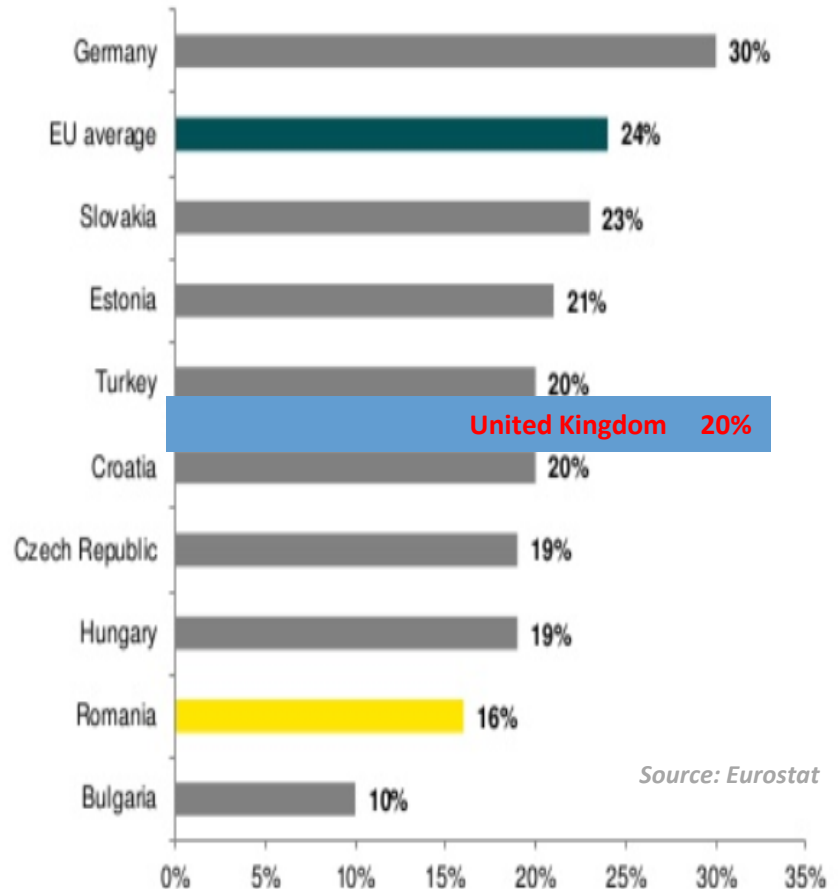
Average net annual salaries, second lowest in EU

€, 2014



Lowest corporate income tax rate in Europe since 2007

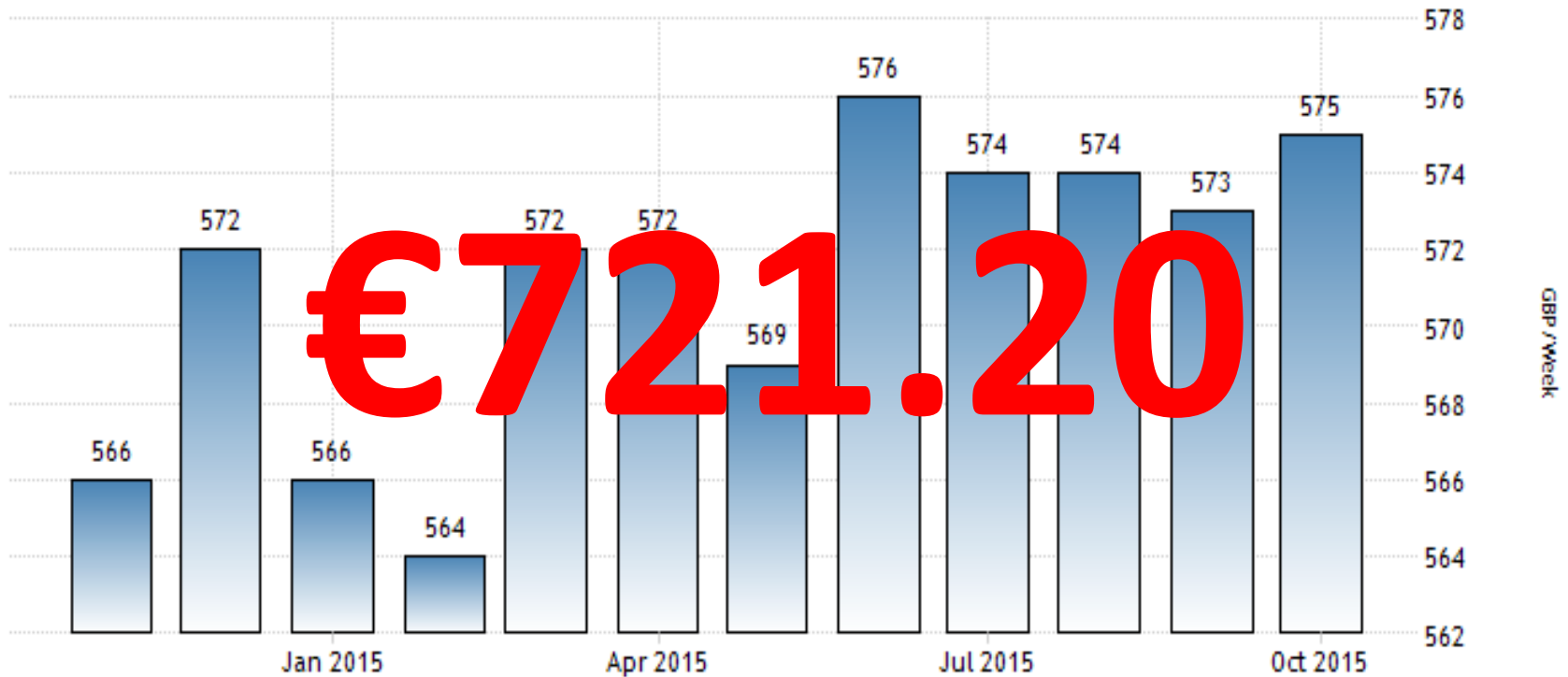
%, 2014



Source: Eurostat

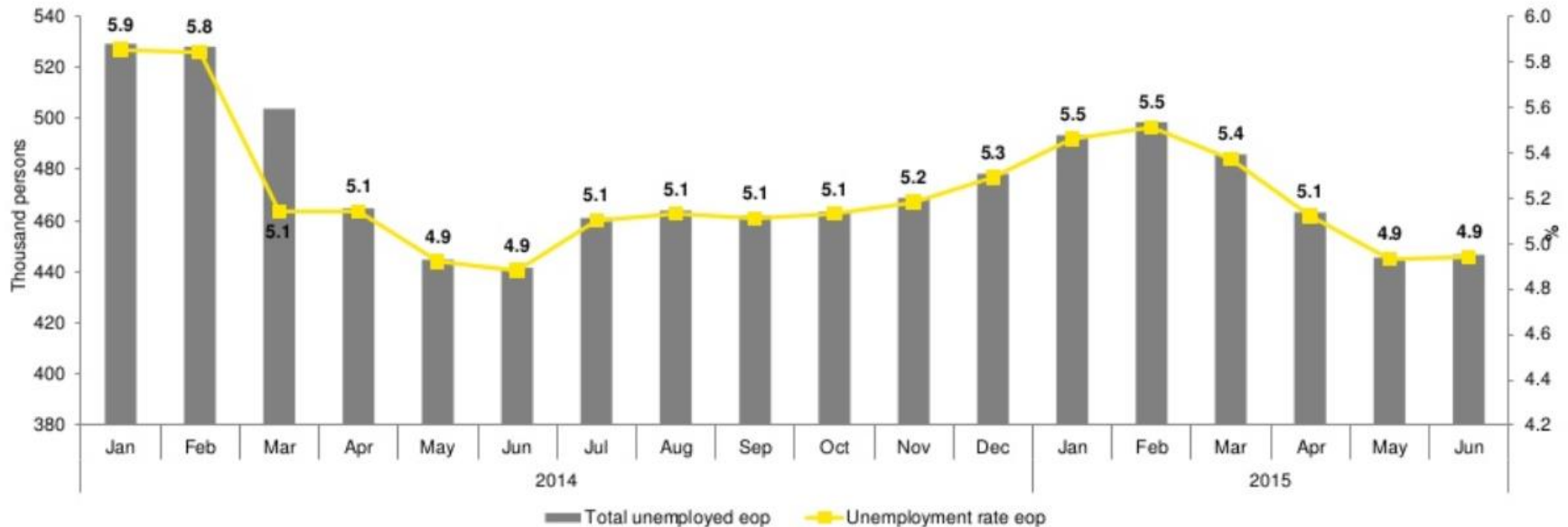
# Manufacturing wages in the UK

UK AVERAGE WEEKLY WAGES IN MANUFACTURING



SOURCE: WWW.TRADINGECONOMICS.COM | OFFICE FOR NATIONAL STATISTICS

# Unemployment reaches new low levels



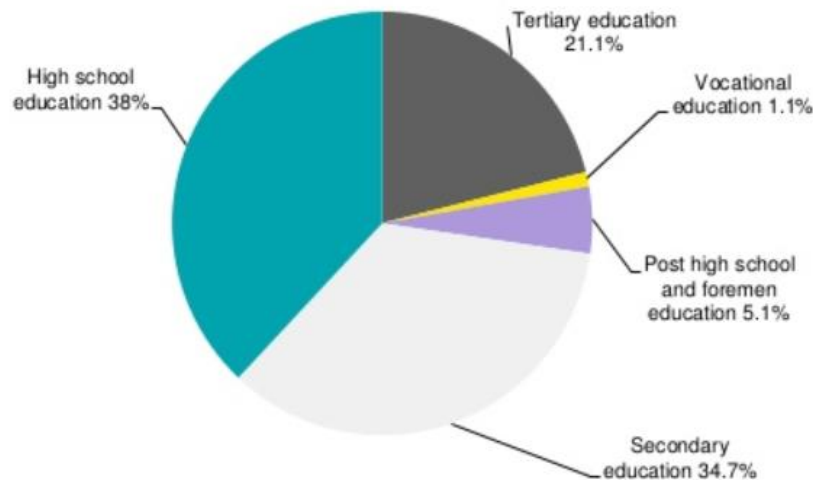
Unemployment levels have been relatively stable during the crisis years. Romania's unemployment rate has been hovering around 7% for a long period. Then the labor market has started to show signs of improvement in 2013-2015 and unemployment has become to descend to levels close to an average of 5.4%.

Source: National institut of Statistic

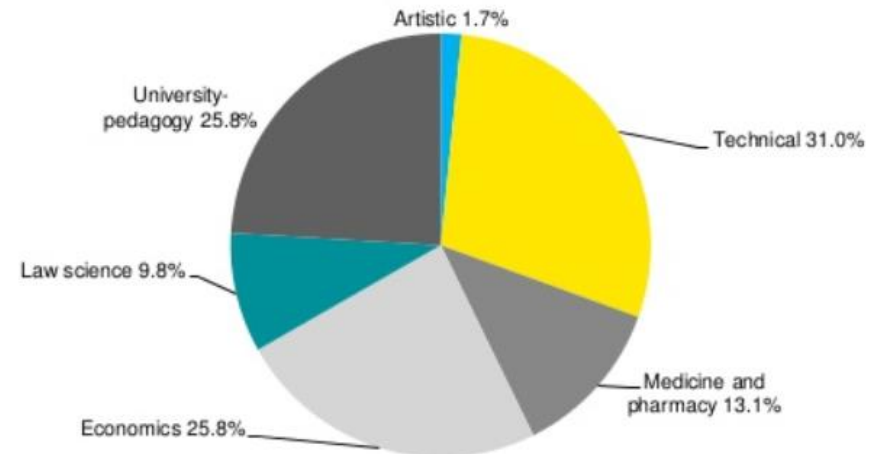


# Educated and Skilled workforce remains an advantage

Graduates, by level of education  
(2012/2013)

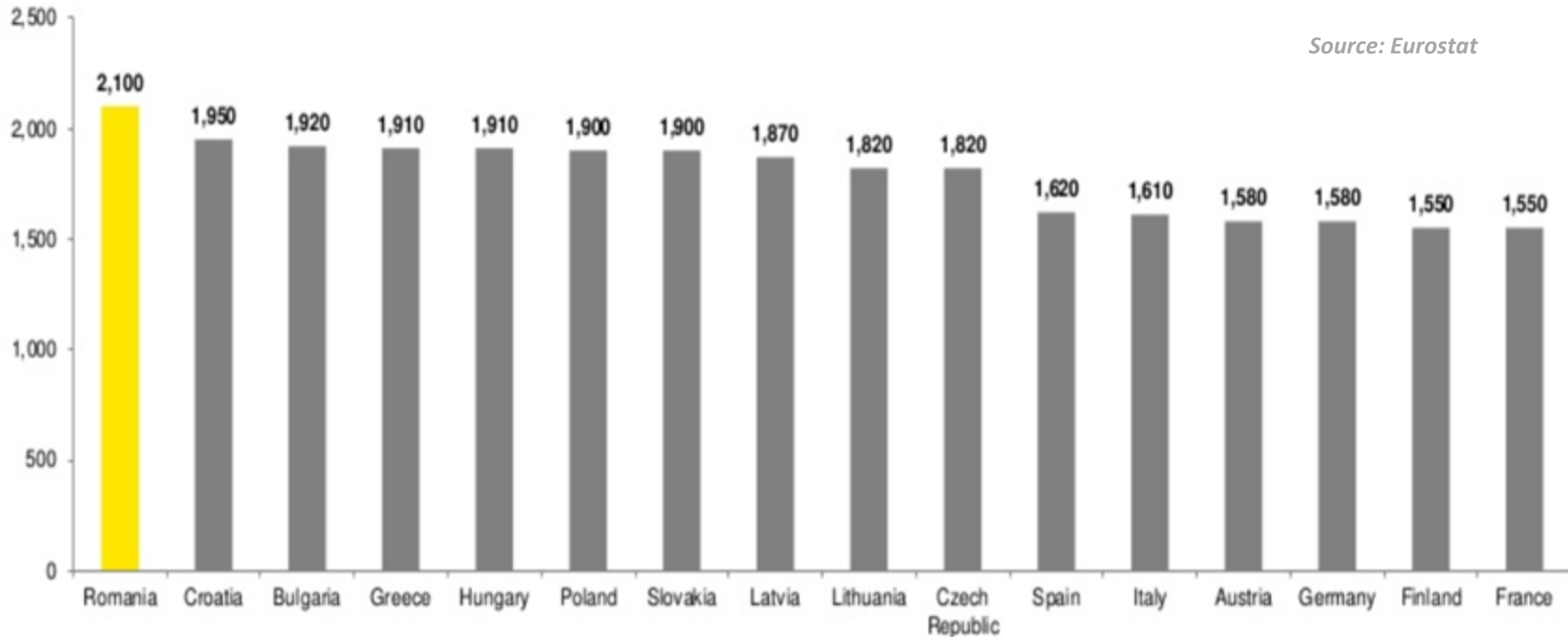


Students in higher education institutes, by specialization groups  
(2012/2013)



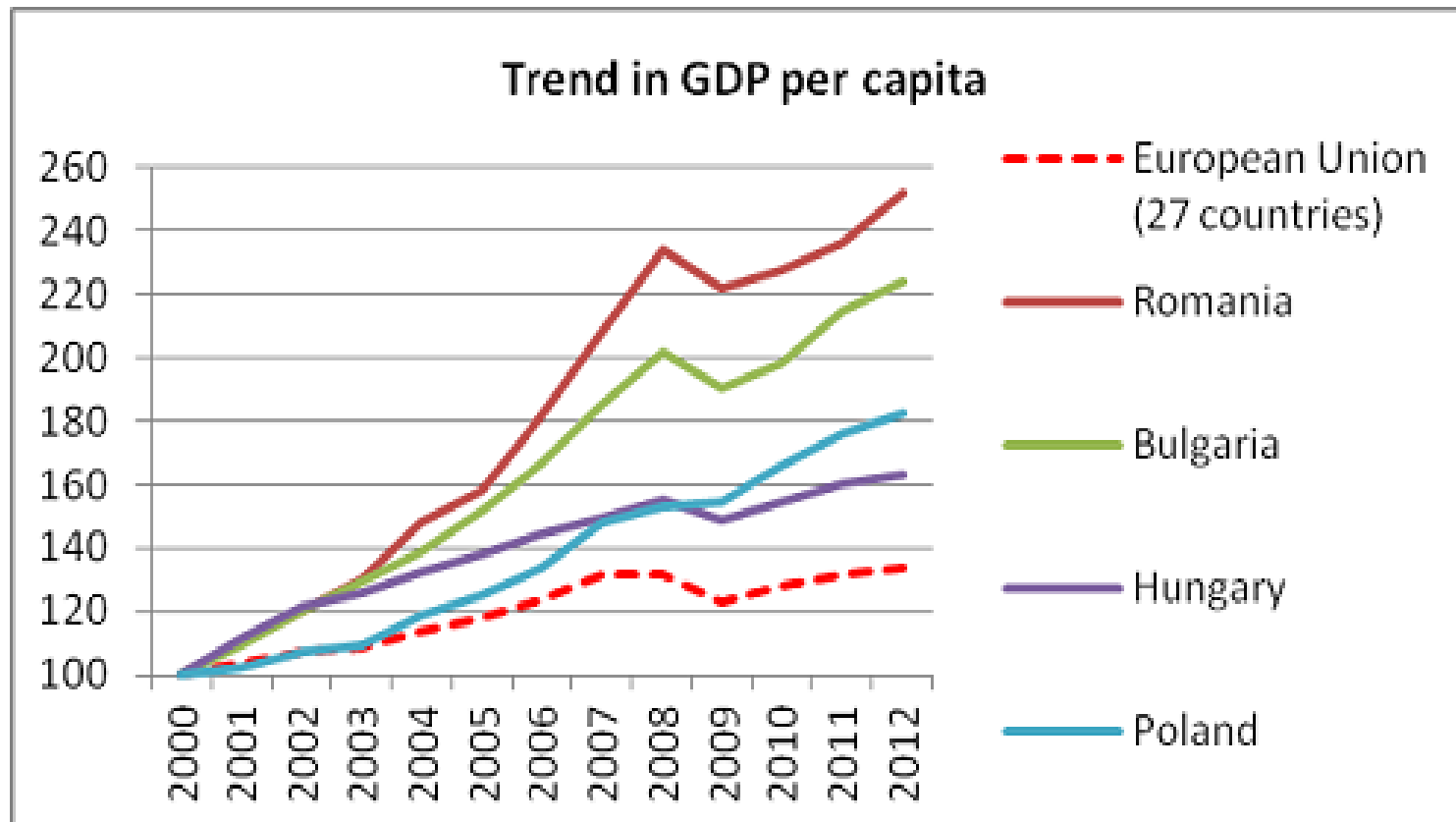
Tertiary education	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014
Tertiary education institutions	106	106	108	108	108	107	103
Faculties	631	617	624	629	614	596	590
Students enrolled - total	907,353	891,098	775,319	673,001	539,852	464,592	433,234

# Average hours of worked by employees per year



With 2,100 average hours worked by employees per year, Romania ranks first in Europe as the hardest working nation. Productivity per hour worked remains low at 45.1 compared to Slovakia (76.5), Hungary (61.5), Czech Rep. (66.6), Poland (59.9). Bulgaria lags behind with a productivity of 43.2.

## Fastest growing GDP in CEE



# Industry

# The major automotive industry companies in Romania





# The geographical concentration of automotive industry in Romania showing headcount and t/o



# Phase **one** for Spirit Circuits





# Phase two



# It takes time





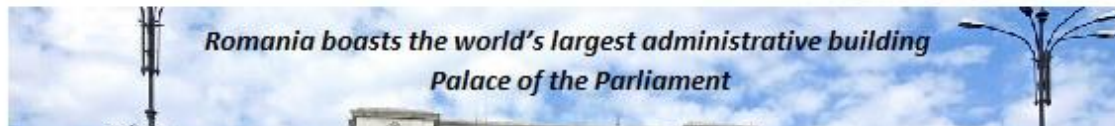
## Finally we purchased the land



## To Summarize

- I have been made welcome
- I feel safe
- There is a “can do attitude”
- Banks and local government have given great support
- The universities are full of eager students
- The location works for us
- Transport is improving
- English is spoken by a high majority
- New technocrat government with a mission to drive out corruption
- Support in UK from Bridge
- Costs are low
- Balanced culture with good values
- Be Patient
- Have an open mind

# Facts about Romania



# Thank You!!!