



# **E-Government in Jordan**

## **A Guide for Policy-Makers**

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منتدى الاستراتيجيات الأردني  
JORDAN STRATEGY FORUM



## منتدى الاستراتيجيات الأردني JORDAN STRATEGY FORUM

The Jordan Strategy Forum (JSF) is a not-for-profit organization, which represents a group of Jordanian private sector companies that are active in corporate and social responsibility (CSR) and in promoting Jordan's economic growth. JSF's members are active private sector institutions, who demonstrate a genuine will to be part of a dialogue on economic and social issues that concern Jordanian citizens. The Jordan Strategy Forum promotes a strong Jordanian private sector that is profitable, employs Jordanians, pays taxes and supports comprehensive economic growth in Jordan.

The JSF also offers a rare opportunity and space for the private sector to have evidence-based debate with the public sector and decision-makers with the aim to increase awareness, strengthening the future of the Jordanian economy and applying best practices.

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@JSFJordan

/JordanStrategyForumJSF

Jordan Strategy Forum

Amman, Jordan



T: +962 6 566 6476



F: +962 6 566 6376

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## 1. Background

The entry of the internet, personal computer, and the mobile phone into everyday life has already changed how people live and work, and how companies do their business. Indeed, the availability of Information and Communications Technologies (ICTs) is also changing how governments serve their people. Undeniably, governments around the world recognize the importance of “e-government”.

The concept of e-government, which has emerged in the late 1990's, is defined by the United Nations (UN) as the “use of ICTs to more effectively and efficiently deliver government services to citizens and businesses. It is the application of ICT in government operations, achieving public ends by digital means”.

No one should underestimate, especially in the developing world, the socio-economic implications of e-government. E-government provides economies with a myriad of benefit. **First**, it increases trust in the government by empowering people to access information regarding any department of government and get involved in the process of decision-making. **Second**, successful implementation of e-government practices improves the quality of government services. **Third**, it increases transparency and traceability of transactions. **Fourth**, proper implementation of e-government practices make it possible for people to get their work done online thereby sparing themselves of unnecessary hassles of traveling to the respective offices. close to the client, or the use of a personal computer in the home or office.

Within the context of the concept of e-government and its envisaged benefits, it is

interesting to note that the United Nations (UN) has been publishing the “E-Government Development Index (EGDI)” since 2003. This publication, presents the state of E-Government Development of 193 UN Member States. Where Jordan ranked 98<sup>th</sup> globally, and scored 0.558 (1= the best, 0= the worst).

The EGDI is based on a “comprehensive survey of the online presence of all 193 United Nations Member States, which assesses national websites and how e-government policies and strategies are applied in general and in specific sectors for delivery of essential services. The assessment rates the e-government performance of countries relative to one another as opposed to being an absolute measurement. The results are tabulated and combined with a set of indicators embodying a country's capacity to participate in the information society, without which e-government development efforts are of limited immediate use”.

The EGDI is a composite measure of three important dimensions of e-government:

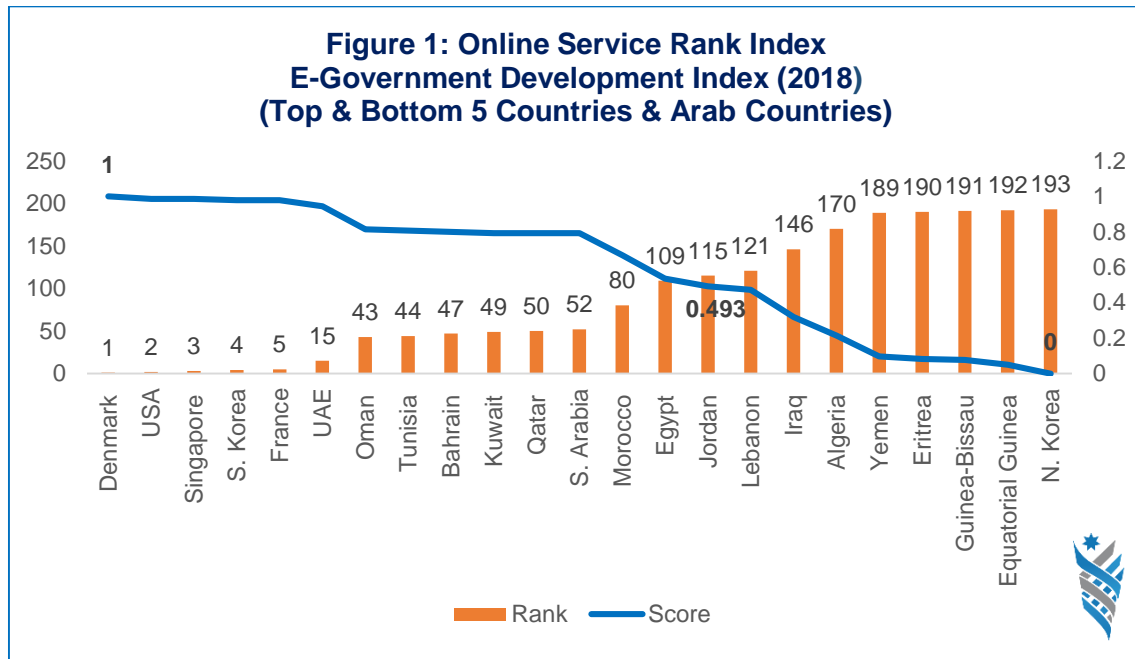
1. **Provision of Online Services.**
2. **Telecommunication Connectivity.**
3. **Human Capacity.**

Relative to the above-mentioned observations about e-government in general, the primary objectives of this policy paper, published by the Jordan Strategy Forum, are three-fold. First, to examine the 2018 ranking and score of Jordan on the 2018 EGDI. Second, to look into how Jordan fared on the EGDI during the period 2003-2018. Finally, based on our findings, a number of recommendations, whose objective is to enhance the process of e-government in Jordan, are outlined.

## 2. Jordan’s Performance based on the Dimensions of E-Government

### 1. Online Service Index (OSI)

This index is based on an assessment of each “country’s national website in the native language, including the national portal, e-services portal and e-participation portal, as well as the websites of the related ministries of education, labor, social services, health, finance and environment as applicable”.



#### Takeaways:

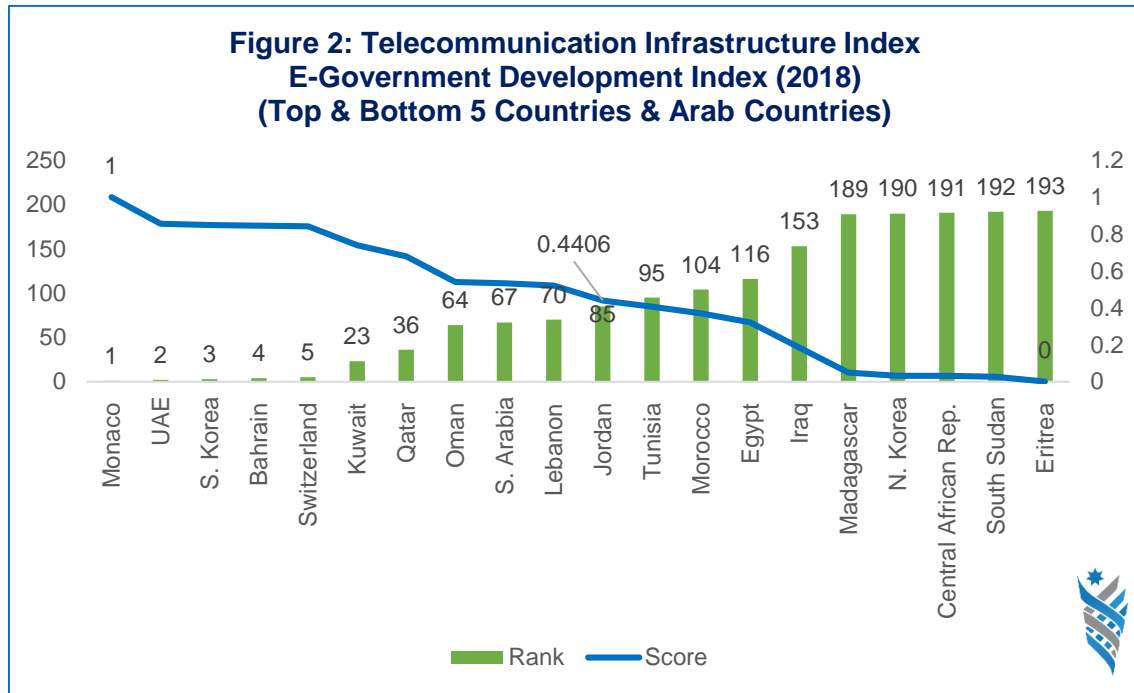
Fundamentally, the *Online Service Index* (OSI) measures the readiness and availability of viable online services. According to the data, Jordan ranks 115 out of the 193 UN Member States. **Jordan’s rank in this index is a key factor in the reduction of its total EGD Index score**, considering the 17-point discrepancy between the 98<sup>th</sup> overall ranking and the 115 OSI ranking.

#### Policy Recommendations:

Since this index represents Jordan’s lowest of the three scores, Jordanian policy-makers should make improving the *Online Service Index* (OSI) the main priority of their e-government development initiatives. **First**, as this index measures the functionality of e-services, the JSF highly recommends the Jordanian government incorporates the private sector (and specifically IT firms) in creating websites that are enhanced, highly functional and easy to use. **Second**, while some websites such as the Ministry of Justice and the Greater Amman Municipality are highly enhanced, other government agency websites lag behind in terms of functionality. This discrepancy should be rectified for the OSI index score to improve.

## 2. Telecommunication Infrastructure Index (TII)

This index is the arithmetic average of five components and these are (1) the estimated number of internet users per 100 inhabitants, (2) number of main fixed telephone lines per 100 inhabitants, (3) number of mobile subscribers per 100 inhabitants, (4) number of wireless broadband subscriptions per 100 inhabitants, and (5) the number of fixed broadband subscriptions per 100 inhabitants.



### Takeaways:

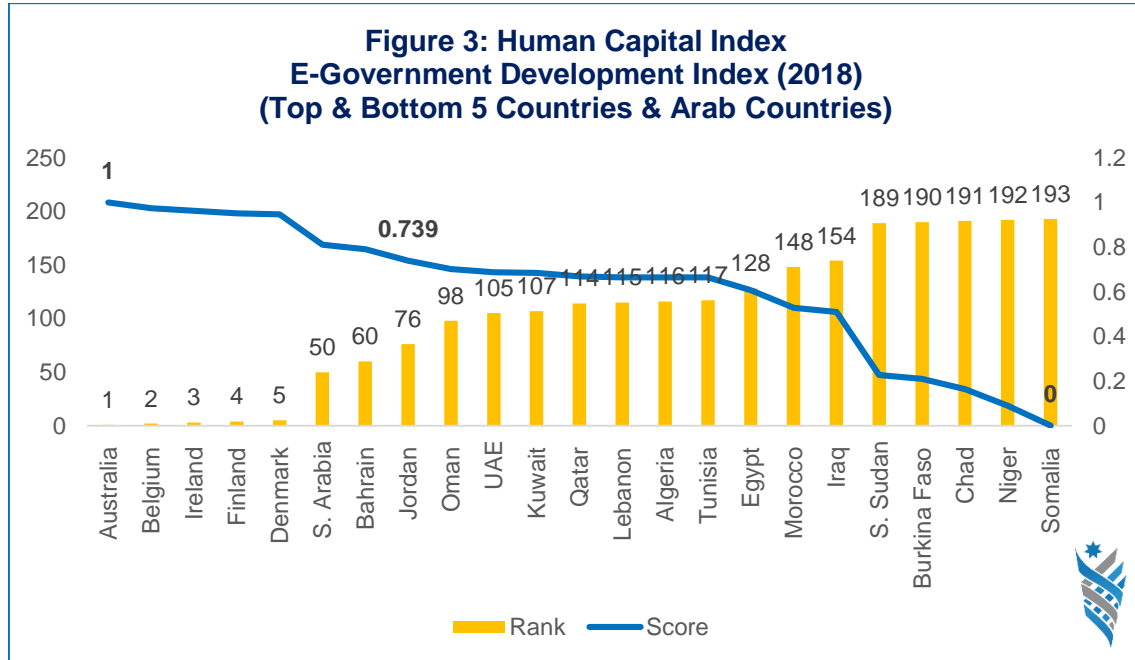
While Jordan’s *Telecommunication Infrastructure Index* (TII) is a favorable 13 ranks lower than Jordan’s total EGD Index, improvements must still be made. Considering an Arab state (Bahrain) is a part of the top 5 countries in terms of telecommunication infrastructure, this portrays a tenable benchmark for Jordanian policy-makers.

### Policy Recommendations:

**First**, in an effort to make these services more accessible, bridging the so-called ‘digital divide’ in Jordan should be a primary focus for policy-makers. Ultimately, the government’s role in boosting Jordan’s rank in this index would be by increasing its spending in Jordan’s infrastructure. This can include ways of increasing internet and fiber-optic penetration, or perhaps improving the user experience for those who are less technologically savvy. **Second**, many people have a bias towards using physical services as opposed to e-services — if both options are available. Reducing the former will see a positive increase in technological penetration in Jordan, considering there will be no alternative to the use of e-services.

### 3. The Human Capital Index (HCI)

This index consists of four components and these are (1) the adult literacy rate, (2) combined primary, secondary and tertiary gross enrolment ratio, and (3) expected years of schooling, and (4) the average number of years of schooling.



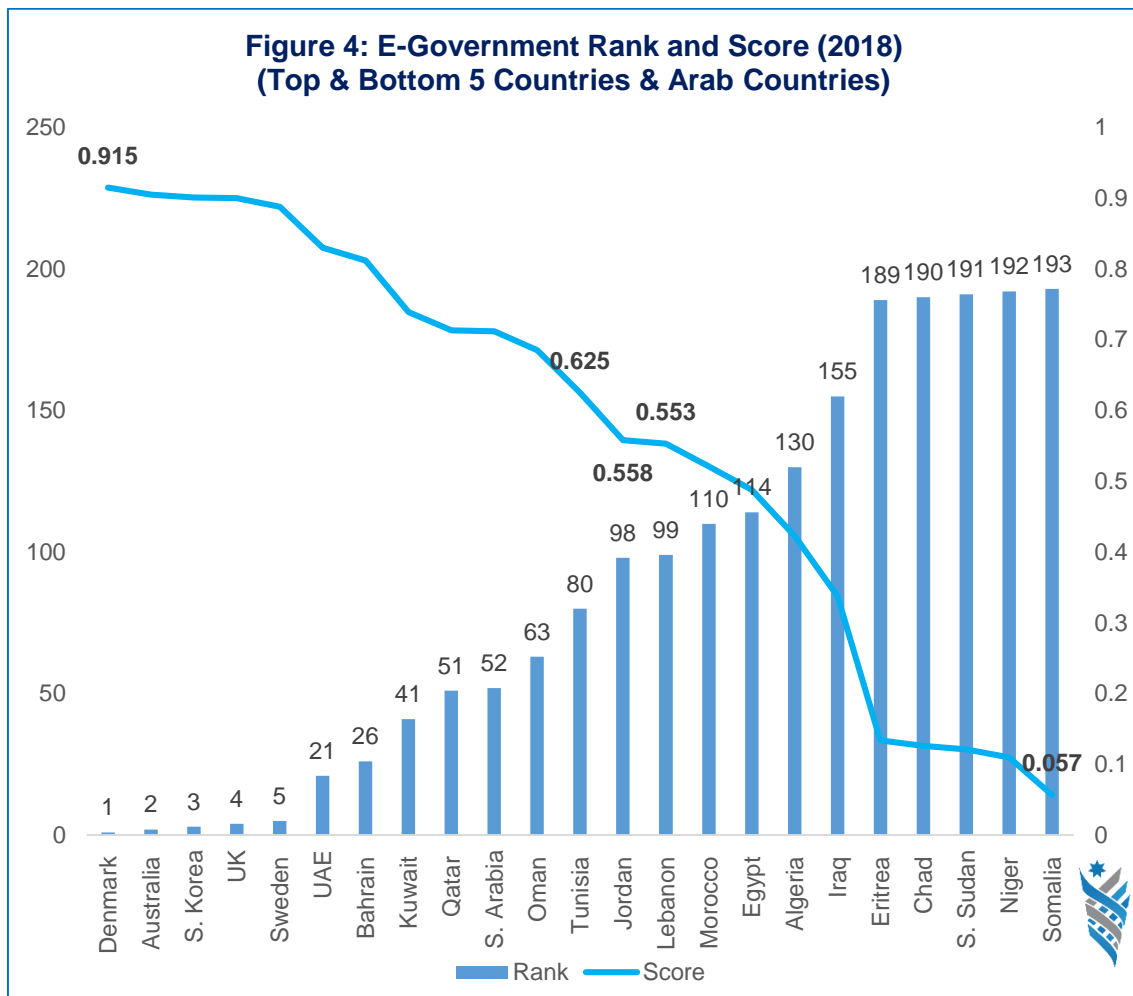
#### Takeaways:

At its core, the HCI index is a useful tool in estimating e-government development considering the positive correlation between advanced human capital and technological proficiency. As of 2018, Jordan ranks 76<sup>th</sup> in the HCI Index, with a total score of 0.739.

#### Policy Recommendations:

Nonetheless, strengthening the public educational system and placing more oversight on the private educational system will garner greater HCI results in the future. **First**, schools and universities should place a priority on providing students with tangible skills, and especially, ICT skills. **Second**, the creation of initiatives and vocational courses by the government is of great import. According to the World Bank, economic development depends primarily on human and physical capital. This should be adopted by Jordanian policy-makers as a stimulant for development.

**4. The 2018 E-Government Development Index: Jordan & Rest of the World**

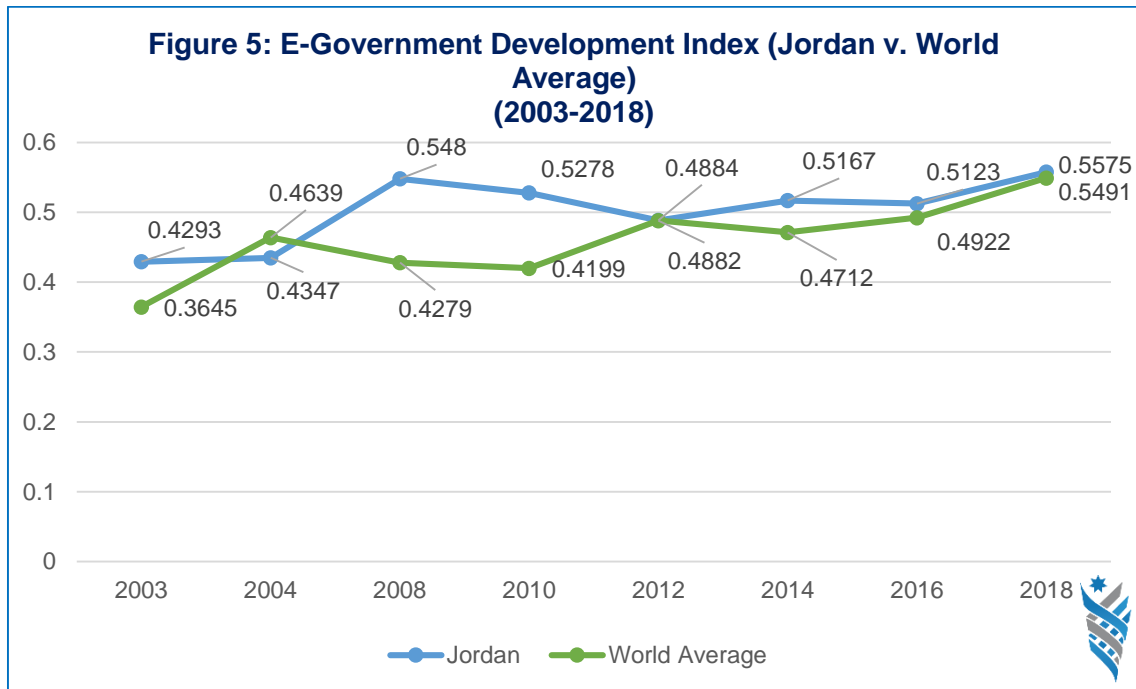


**Takeaways:**

- On average, European countries outrank the world in terms of their EGDI scores. Three of the top five scores are European countries.
- The aforementioned graph portrays a clear discrepancy between the Arab Gulf countries and the rest of the Arab world.
- The bottom five states are all situated in Africa. Africa continues to have the least developed e-government progress, considering it has many low-income states that would rather allocate resources elsewhere.



## 5. Jordan's Development on the E-Government Development Index: 2003-2018



### Takeaways:

- Countries strive to perform above the world average. From 2004 to 2012, Jordan was outperforming the world average in its score by a significant margin.
- From 2012 to present, we still witness Jordan slightly outperforming the world average.
- Despite Jordan slightly outperforming the world average, it has drastically moved back in the total ranking.

### 3. General Policy Recommendations

- 1. A clear and decisive national strategy:** While the government has implemented e-government national strategies (such as the *e-Government Strategy 2014-2016* and *Reach 2025*), the lack of cohesion and coordination between government departments should be addressed.
- 2. Partnerships with Gulf States:** Considering the strong bi-literal ties between the Arab Gulf states and Jordan, when possible, Jordanian policy-makers should use the Gulf states as a benchmark for e-services and the technological infrastructure.
- 3. Increasing the variety of e-services:** According to *The Jordan Times* (2018), Minister Muthana Gharaibeh claims that of the 1,900,000 citizens who used e-services in 2018, most of them were for 'no-criminal record certificates', property tax and traffic offences. The Jordanian government should consider widening the scope of its services.
- 4. Retention of qualified staff:** According to the Ministry of Information Technology (now defunct), the government's inability to hire and retain qualified IT staff is a key hindrance to the development of a viable e-government system.
- 5. Private-Public partnerships:** The private sector should be meaningfully involved in and should participate in the transformation of e-services in Jordan. The government should encourage private-public partnerships and focus in developing the ICT sector in Jordan.
- 6. Keep up with the developed world:** According to the EGD, 'developed' countries vastly outperform their 'under-developed' or 'developing' counterparts. Technology transfers and adopting the innovations these countries employed will facilitate faster e-government growth.
- 7. A total system instead of disintegrated services:** As of June 2019, e-services are largely sporadic when it comes to the total sphere of government services. Some ministries and agencies grossly outperform others. Having clear KPIs and an overseeing authority could help bridge this gap.
- 8. Increasing government spending:** While the Jordanian government cannot increase its public spending currently (as stipulated by the IMF program that will bring down the debt-to-GDP ratio from 95% to 77% by 2021), increasing government expenditure in the e-government systems can actually increase government revenue. This is due to higher demand, making services more efficient and by reducing the workload on civil servants.
- 9. Mitigate resistance to change:** The World Bank identifies resistance to change as a factor in sluggish e-government development. The Jordanian government needs to find a way to reduce resistance to change in both government institutions and the general public.
- 10. Address challenges and negative externalities:**
  - A. Structural (or occupational) unemployment:** The implementation of digital technologies and e-processes will result in widescale structural unemployment, which will require training and re-education for workers that will find themselves unemployed. The Jordanian government must create a contingency plan for such a situation, considering roughly a quarter of its working population is employed in the public sector.



- B. Cyber security risks:** Considering Jordan's geopolitical position and the threats of terrorism that encompass the region, the Jordanian government must also ensure the integrity of its e-government systems. This includes analyzing cyber security risks and making sure the proper proactive measures are taken to ensure official servers and systems are immune from cyber-attacks
- C. Privacy and data:** Sensitive data that is stored on government services should also be encrypted and well-protected from accidental or malicious dissemination.
- D. Technical issues:** This could delay or compromise certain services, reducing their effectiveness and diminishing public perception. The government should employ methods to mitigate potential technical difficulties.

## 5. Conclusion

Despite efforts by current and previous governments, Jordan's *E-Government Development Index* score is regressing in recent years. E-government progression is essential in Jordan considering the plethora of positive effects it will have on both the economy and the political structure. Revamping the current portfolio of e-government services and moving towards automation in a way that is user-intuitive and in line with international standards is essential to keep up with the worldwide advances in technology. These advances will create a uniform services portfolio that is free from subjectivity, judgmental decisions and human error, which will in turn create an equal platform for all users. This is why Jordanian policy-makers should take a closer look into both ways to increase e-government development and analyze the implications (both positive and negative) it may have in Jordan.

## 6. Further Reading

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منتدى الاستراتيجيات الأردني  
JORDAN STRATEGY FORUM

Tel: +962 6566 6476

Fax: +962 6566 6376

[info@jsf.org](mailto:info@jsf.org)

[www.jsf.org](http://www.jsf.org)

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