

Federal spectrum relocation

Our point of view: A structured approach to support federal agencies' execution of complex spectrum relocation to support the administration's vision of freeing up 500 MHz of spectrum for commercial mobile broadband development.



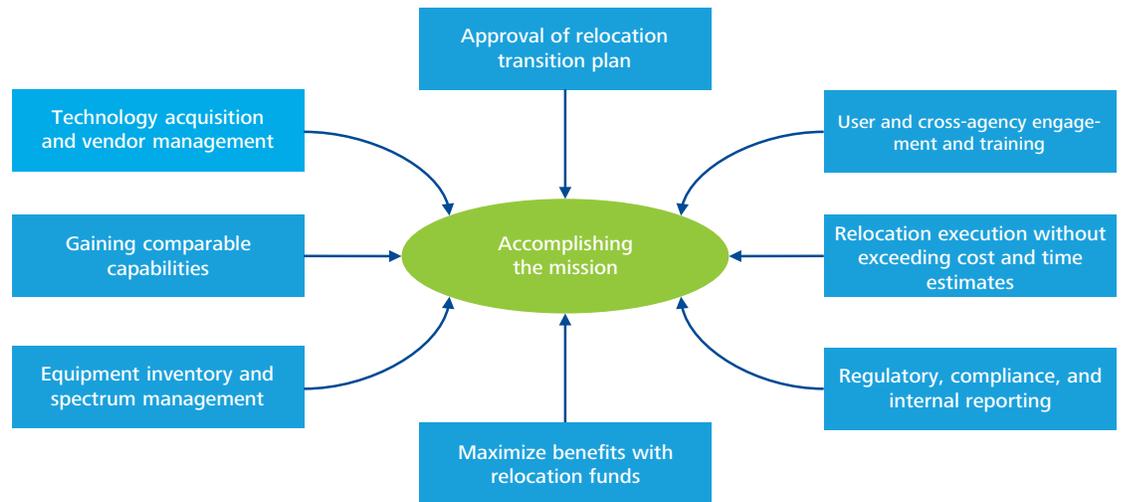
Spectrum reallocation will have a far-reaching impact on wireless communication systems used by federal agencies to support emergency response, law enforcement, and national security duties.

Federal agencies answered the administration’s and industry’s call to support reallocation of federal spectrum to promote mobile broadband growth and innovation. This valuable spectrum resource enables video and radio communications required by agencies to achieve their mission and goal of protecting the public from terrorism and crime. The goal has not changed. The mission is only getting more complex with advances in technologies and the ever-changing shape and form of our adversaries and the threats the nation faces. In such an environment, the affected federal agencies will be challenged to stay focused on their core mission while finding a way to transition to comparable capabilities without interfering with their mission priorities.

Federal agencies have a unique opportunity to maximize the benefits while answering the reallocation call.

Technology innovations are reshaping business, government, and society, which are creating disruptions at a pace unseen before. Federal agencies can take this opportunity to seek innovative technical solutions, rapidly adaptable to next-generation video surveillance and wireless communications needs. Agencies have developed relocation cost and time estimates and technology solutions for approval. It will be critical to execute the technology and spectrum transition staying under time and cost estimates and, most importantly, continuing to protect mission priorities. Agencies may anticipate challenges, as illustrated in Exhibit 1, having far-reaching impact on their strategy and operations, and will require a holistic, structured approach to achieve their goals.

Exhibit 1: Anticipate, Acknowledge, and Address Challenges



Our experience in supporting clients on such large and complex endeavors suggests deploying a business transformation approach.

The affected federal agencies have been notified by the regulators. The agencies have actively participated to evaluate options between sharing and relocating, assessed feasibility of using alternate spectrum bands, considered industry priorities, and have shared their assessments, along with preliminary time and cost estimates to relocate.

Organizations have chosen to follow a business transformation approach to manage complex and costly initiatives, such as spectrum relocation. We believe federal agencies should consider deploying Deloitte’s Spectrum Relocation Framework — a unique approach to enable agencies to successfully transition while protecting their core mission priorities. Subsequent to the AWS-1 auction, the industry called upon the agencies to vacate auctioned spectrum immediately. Based on our experience working with federal agencies, we understand that answering industry calls, managing budgets, and meeting compliance requirements can distract agencies not only from their core mission, but also from effective implementation of spectrum relocation.

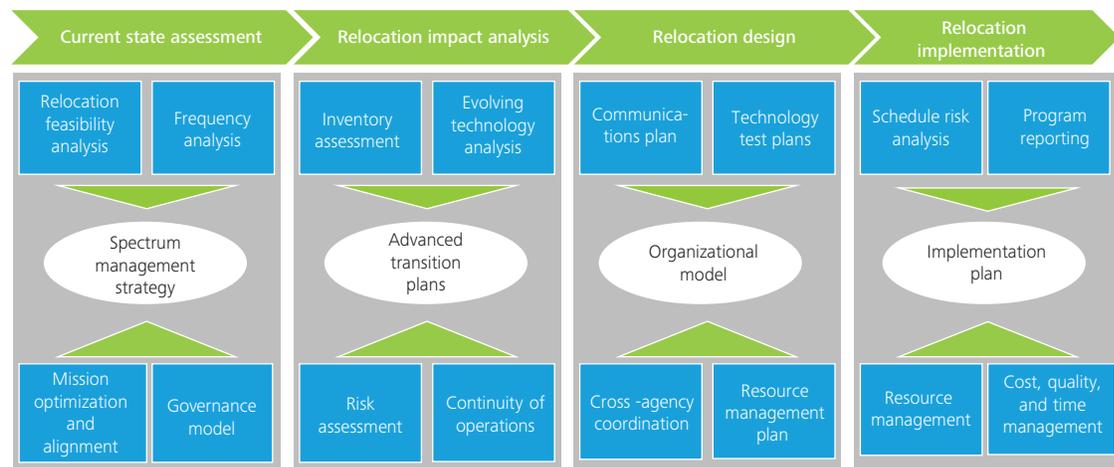
Deloitte’s Spectrum Relocation Framework is designed to deploy industry leading practices and tools to support the agency plan and implement relocation in an effective and efficient manner.

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Deloitte's Spectrum Relocation Framework

Deloitte's Spectrum Relocation Framework offers federal agencies an ability to understand and evaluate the far-reaching impacts of a complex spectrum relocation endeavor on their operations. It provides a structured approach to assess the impact on each organizational lever and a method to address challenges in preparation for relocation. The framework offers a phased approach, beginning with current state assessment, followed by analysis and design, leading to implementation.

Exhibit 2: Spectrum relocation framework



Deloitte value delivered

- Scalable end-to-end relocation framework
- Business and operations modelling skills coupled with RF systems experience
- Focused assessment and evaluation of people, process, and technology
- Ready-to-use templates and methods to expedite analysis, design, and implementation
- Strong relationships with industry, federal, state, and local governments
- Strategic advisor for federal government to manage spectrum
- Extensive reporting capabilities to inform legislative, executive, and regulatory stakeholders
- Independent and objective assessment

People: Conduct stakeholder impact analysis. Inform and educate affected stakeholders across the organization, including technology users, system managers, mission leaders, finance managers, and procurement staff.

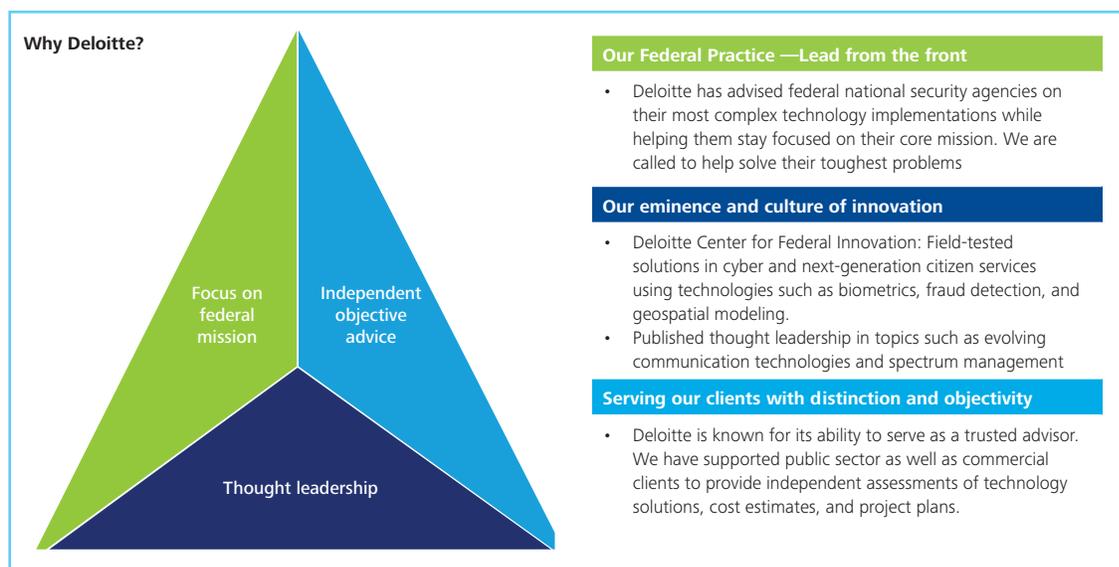
Process: Define processes with inputs from affected stakeholders to understand tasks to be performed, how to manage change and change requests, and to evaluate the impact of external events.

Tools: Identify requirements for tools and their deployment to effectively manage the complex spectrum relocation.

Communications and reporting: Set expectations and conduct ongoing communications with internal and external stakeholders.

Governance: Develop guidelines to stay focused on the mission while meeting relocation time and cost estimates.

Exhibit 3: Our value add



Our value proposition is backed by demonstrated capabilities

Deloitte knows the results of complex system implementations are dependent upon the preparation and support of the stakeholders that will be affected by the changes. Deloitte possesses the specific consulting, industry, and regulatory capabilities needed to design and execute the complex, mission affecting spectrum relocation for federal agencies.

- **We understand nationwide spectrum relocation:** Deloitte is tasked to perform program management duties supporting a nationwide spectrum rebanding effort that has affected over 2,200 state, local, and commercial entities. In this role, Deloitte supported the objectives of affected public safety entities to gain comparable capabilities and continue to respond to emergencies, while executing the relocation tasks.
- **We understand the telecom industry:** Deloitte serves nine of the top 10 telecommunications equipment manufacturers, nine of the top 10 wireless service providers, and nine of the top 10 wireline service providers.
- **We understand spectrum:** Deloitte has provided strategic and tactical consulting services to address government and commercial clients' spectrum management challenges in the United States and internationally. The key qualifications include developing spectrum strategy for a commercial carrier, conducting detailed financial and business analysis of the public safety (shared) D block, developing spectrum policy and requirements for the public safety and military users, and program management of a multibillion-dollar nationwide spectrum reconfiguration effort.

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Deloitte is well positioned to support federal agencies relocate their operations to new spectrum. Deloitte proposes to deploy a Spectrum Relocation Framework that is based upon its core service offerings of Business Model Transformation and Spectrum Management Services. The framework will help federal agencies execute the complex and mission-critical relocation process in a structured manner.

Deloitte's thought leadership

