

6. Sequencing Plan

A fundamental tenet of VA's approach to enterprise architecture is that it is top down and business focused. The ten Enterprise Business Functions (EBFs) and eight Key Enabling Functions (KEFs) at the foundation of the Department of Veterans Affairs have been used to organize the development of the One-VA EA. Chapter 3 identified these EBFs and KEFs, defined them, and identified the major data classes, motivations and locations associated with them. Chapter 4 carried this theme further by decomposing the EBFs and KEFs into subfunctions and decomposing the major data classes associated with those subfunctions. All of this is presented in chapters three and four from a top down, business focused perspective.

Chapter 4 carried this theme further in seven areas to develop allocated functional baselines. These include the infrastructure areas of Telecommunications, Cyber Security, and Corporate Data Centers with Continuity Of Operations (COOP). Allocated functional baselines also include the enterprise-wide One-VA service areas of Registration and Eligibility, National Contact Management, and Supplier Management within Finance and Accounting. Finally it includes the vertically focused Health Data Repository. In developing these allocated functional baselines, Information Technology (IT) systems are defined in functional terms by allocating subfunctions, and data classes to them. This maps the subfunctions within the EBFs and KEFs to IT systems. This is the first time within the development of the One-VA Enterprise Architecture that IT systems are discussed, while maintaining the top down, business focused perspective.

Chapter 5 makes the transition from purely business focused and functional perspectives to an IT system perspective. It presents the first IT system focused discussion within the One-VA EA, with initial emphasis on the foundational infrastructure of the Telecommunications Modernization Project (TMP), the Enterprise Cyber Security Infrastructure Project (ECSIP), the Corporate Data Center Integration (CDCI) Project, and Regional Data Centers. In each case, the "as-is" and the "to-be" logical and / or physical distributed systems architecture is presented. With the exception of the Regional Data Center Initiative, each of these represents an executing formal Project within VA. Chapter 5 then presents the logical and / or physical distributed systems architecture at the applications layer within Health Care, Benefits and Memorial services. In each case the "as-is" architecture is presented and to the extent that it has been established, the "to-be" architecture is also presented.

When transitioning from a business and functional perspective to an IT systems perspective, it is important to consider the relative time phasing of business process reengineering efforts, IT system development efforts and the key interdependencies between those IT systems within the overall logical and physical distributed systems architecture. This is the primary subject addressed within this chapter of the One-VA Enterprise Architecture.

6.1 Migrating to the One-VA Enterprise Architecture

Figure 6-1 presents the overall Sequencing Plan for migrating from VA's current "as-is" state to the "to-be" One-VA Enterprise Architecture. Continuing the themes of Chapter four and five, this sequencing plan focuses on foundational infrastructure and then applications, primarily rebaselined projects or new project initiations within the Department's Fiscal Year 2004 budget submission. With time progressing from left to right across the Figure, the heavy black circular nodes represent the time phasing of the projects, and the red vertical arrows indicate key interdependencies among projects¹.

At the center of the diagram, the core One-VA "To-Be" Enterprise Architecture is depicted. Where projects are already fully defined and / or in execution, the intersection with the central One-VA "To-Be" Enterprise Architecture represents the baseline schedule established for the project. In those cases where the project is a new start and has yet to enter execution the intersection represents an approximate schedule anticipated for the project.

Multiple architectural service layers are identified in Figure 6-1 around the One-VA "To-Be" Enterprise Architecture core. An Infrastructure architectural service layer is the first layer identified surrounding the core to address foundational services used by most if not all other architectural layers. Next a One-VA Enabling Service architectural layer depicts enterprise wide applications services to be implemented once and reused broadly across the Department. Finally three applications architectural service layers are identified for the vertical services required in Health, Benefits and Memorial Business Applications.

6.1.1 Infrastructure Architectural Service Layer Projects

The first architectural service layer around the core One-VA "To-Be" Enterprise Architecture is foundational Infrastructure. This includes the wide area telecommunications infrastructure being provided by the Telecommunications Modernization Project (TMP) throughout its multiple phases as described in section 5.2 of this One-VA Enterprise Architecture. It also includes the Enterprise Cyber Security Infrastructure Project (ECSIP) throughout its multiple phases as described in section 5.3 of this One-VA Enterprise Architecture. ECSIP is fundamentally dependent on the TMP project to optimize the performance of the wide area network services to carry transit traffic as local external network gateways are reduced and corporate and / or regional gateways are established. This interdependence is reflected in Figure 6-1. The final infrastructure project identified in Figure 6-1 is the Authentication and Authorization Infrastructure (AAI) Project. This project will provide enterprise wide Single Sign On (SSO) services to link authenticated individual identities to functional roles they are authorized to assume, and to link functional roles to the applications services and data

¹ No attempt is made in this sequencing plan to identify every interdependence between projects since to do so would render such a figure illegible. For example, virtually every project has dependence on the underlying network and cyber security infrastructure. For the purpose of clarity and identifying interdependencies that are not so obvious, only selected key interdependencies are shown in this One-VA Enterprise Architecture Sequencing Plan.

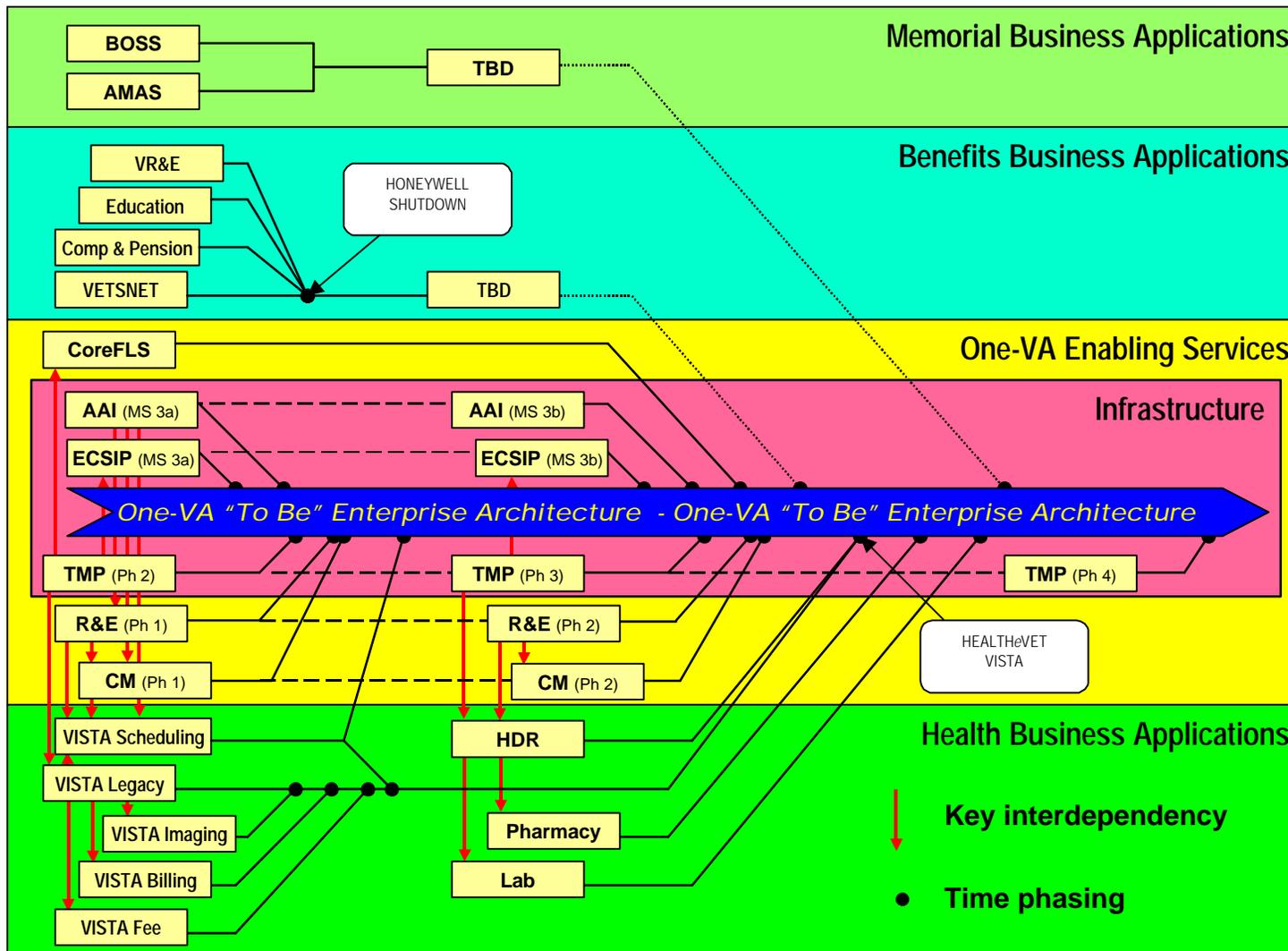


Figure 6-1 The One-VA Enterprise Architecture Sequencing Plan

classes they are allowed to access. These authorizations then form the basis of access control decisions and auditing actions enforced within individual systems.

6.1.2 One-VA Enabling Service Architectural Layer Projects

The second architectural service layer around the core One-VA “To-Be” Enterprise Architecture and the Infrastructure architectural service layer is a One-VA Enabling Service layer. It depicts applications layer services that are being standardized on a One-VA enterprise wide basis and called upon by multiple other applications layer projects in lieu of redundant implementations of the services embedded within multiple vertical applications. Three projects are identified in this One-VA Enabling Service architectural layer.

CoreFLS is the enterprise Finance and Accounting service currently in execution within VA. The One-VA Registration and Eligibility (R&E) project was treated at length in sections 3.16 and 4.16 as a functional consolidation and integration opportunity. The One-VA National Contact Management (CM) project was likewise treated at length in sections 3.17 and 4.17 as a functional consolidation and integration opportunity. Since CM will depend on the consolidated repository of Veteran information established by the One-VA R&E project, a key interdependence between them is reflected in Figure 6-1. Similarly, both the R&E and CM projects will utilize services provided by the Authentication and Authorization Infrastructure project. Those interdependencies are also reflected in Figure 6-1.

6.1.3 Health Business Applications Architectural Service Layer Projects

At the core of the Health Business Applications architectural service layer is the VistA Legacy system and its transition into VistA Health_eVet in the context of the One-VA “To-Be” Enterprise Architecture. This transition is illustrated in Figure 6-1 with the shift from the current Computerized Patient Record System (CPRS) within the distributed Legacy VistA systems to a Health Data Repository (HDR) based CPRS. This transition reflects the transformation identified in section 5-1 from facility centric health care where patient records are dependent on the facility where a patient is seen, to patient centric where a longitudinal health care record is maintained for each patient independent of the health care facility at which the patient is seen. This transition will clearly have a critical dependence on a high performance telecommunications infrastructure provided by a fully optimized TMP project as reflected in Figure 6-1.

Prior to the transition to HDR, Figure 6-1 reflects several VistA applications developments that have been in development for some time and are in various stages of maturity, to include VistA Imaging, VistA Fee, and VistA Billing. It also reflects the newly initiated VistA Scheduling Project, which is the first project being implemented on an integrated basis with services from the Infrastructure and One-VA Enabling Services architectural layers. VistA Scheduling is being implemented on an integrated basis with Authentication and Authorization Infrastructure, One-VA Registration & Eligibility, and National Contact Management, as indicated by the interdependencies shown in Figure 6-1. This is why it is shown converging with both the Legacy VistA environment and the One-VA “To Be” Enterprise Architecture core in Figure 6-1. While not explicitly

identified to reduce clutter, subsequent VistA developments to include HDR, Pharmacy, and Laboratory applications projects will also be implemented in this same integrated fashion with dependence on services from the Infrastructure and One-VA Enabling Service architectural layers.

6.1.4 Benefits Business Applications Architectural Service Layer Projects

At the core of the current Benefits Business Applications architectural service layer is the VETSNET project. Figure 6-1 reflects the near term effort to complete multiple applications within the Compensation and Pension Enterprise Business Functions to transition off the Bull DPS 9000 platform identified in Figure 5-13. In similar fashion, it reflects efforts to complete applications in the Education and Vocational Rehabilitation and Employment Enterprise Business Functions necessary to transition off the Bull DPS 9000 platform and retire that legacy platform.

Beyond these near term modernization efforts identified above aimed at retirement of the aging Honeywell/Bull systems, the Department has established a strategic objective to transform the current benefits processing processes from a highly document (both paper and scanned paper) centric approach to a data centric approach. The target applications layer and distributed systems architecture to support this objective will be cast within the context of the overall One-VA “To Be” Enterprise Architecture to include integration using the Infrastructure and One-VA Enabling Service Architectural layers depicted in Figure 6-1. As discussed in Section 5.5.2 however, it is premature at this time to identify how that transformation initiative will affect the applications layer distributed systems architecture across the enterprise. Therefore, the sequencing plan for related project implementations is identified as To Be Determined (TBD) in Figure 6-1 and will be provided in later versions of this One-VA EA as the associated projects proceed into execution.

6.1.5 Memorial Business Applications Architectural Service Layer Projects

At the core of the current Memorial Business Applications architectural service layer are the current Automated Monument Application System (AMAS) and Burial Operations Support System (BOSS) applications. As discussed in Section 5.5.5, they reflect a strong centralization of services at the NCA ‘regional’ data center located at Quantico, Virginia, and are therefore significantly closer to the target regional processing model discussed previously in Section 5.5.4 of the One-VA EA. The only significant evolution that is required is away from the administration specific WAN and cyber security infrastructure identified in Figure 5.21 to the corporate telecommunications infrastructure and cyber security infrastructure discussed earlier in Sections 5.5.2 and 5.3.2. Beyond that near term evolution, it is premature at this time to identify future initiatives that will further evolve the Memorial Business Applications architectural layer. Therefore, the sequencing plan for related project implementations is identified as To Be Determined (TBD) in Figure 6-1 and will be provided in later versions of this One-VA EA as the associated projects proceed into execution.