How to Ease Benefits Management in Defense Organizations with Business Rules Management

SAP

Applies to:

SAP NetWeaver Composition Environment 7.1.1

Summary

This document takes a deep look into the challenges that Defense Organizations run into in the process of managing their complex benefits programs and argues how business rules management technology can offer a solution for these challenges

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Introduction

Many countries deploy personnel from their Armed Forces & Services outside their national borders for a variety of missions. For such members, these services typically will have put in place several benefits and allowances to ensure that members should be neither better nor worse off than their counterparts serving at home.

This document takes a deep look into the challenges that Defense Organizations run into in the process of managing these benefits programs.

Benefits and Allowances - Background

Defense personnel on international duty are entitled to a large and complex array of benefits. These benefits can be in the form of allowances, bonuses, reimbursements and so on. Here are some examples of such benefits

1. Hardship Allowance
2. Risk Allowance
3. Post Combat Reintegration Allowance
4. Daily Meal Allowance
5. Rent Share
6. Purchase of Furniture & Appliances
7. Medical Coverage of Special Dependant
8. Various flavors of Home Leave Travel Allowance
9. Emergency Evacuation & Loss
10. Health Club Fees

There are very clear definitions and guidelines on how such benefits are to be awarded, and in case of reimbursements, how claims are to be validated and settled.

It is very important for the Defense Services to not only maintain and provide such allowances, but also to ensure that these benefits are awarded in a smooth and transparent fashion and validation of claims where applicable is done quickly and settlements released in the fastest possible time. The reason being that handling these benefits badly will have a direct impact on the morale of the defense personnel

The benefits schemes used by defense forces come in a huge variety and complexity. All defense forces use such benefits schemes to incentivize the Services. Here are some illustrative examples of such benefits schemes

- Benefits related Regulations in Canada
- Pay and Conditions in Australia
- US Army Hardship Duty Pay
- UK Royal Navy Allowances

Some examples of benefits regulations from the Canadian document are here for illustration

*10.3.05(1) (**Intent**) The intent of the Hardship Allowance (HA) is to compensate for the living conditions existing at a specific post.*

*10.3.05(2) (**Levels of HA**) There are seven levels of HA, from zero (no difference from a typical base standard) to six (very austere). The Chief of the Defense Staff approves the HA level for the post upon recommendation by the Departmental Hardship and Risk Committee. Once established, the HA Level is reviewed on a semi-annual basis or as required for each operation.*

10.3.05(3) (**Monthly rate**) *The rate of HA for each level is a percentage of the maximum total of the Post Differential Allowance (PDA), except for the PDA Bonus, payable under section 16 - Post Differential Allowance, as follows:*

HARDSHIP ALLOWANCE							
LEVEL	O	I	II	III	IV	V	VI
PERCENTAGE	0	10	20	30	40	50	60

10.3.06(3) (**Levels**) *The HA Bonus level to which a member is entitled is based on points accumulated for service on operations as follows:*

POINTS	*Percentage*	POINTS	*Percentage*
0 to 6	*0*	91 to 96	*160*
7 to 12	*20*	97 to 102	*170*
13 to 18	*30*	103 to 108	*180*
19 to 24	*40*	109 to 114	*190*
25 to 30	*50*	115 to 120	*200*
31 to 36	*60*	121 to 126	*210*
37 to 42	*70*	127 to 132	*220*
43 to 48	*80*	133 to 138	*230*
49 to 54	*90*	139 to 144	*240*
55 to 60	*100*	145 to 150	*250*
61 to 66	*110*	151 to 156	*260*

The above regulations for hardship allowance are only a small example from an exhaustive 164 page document with detailed and interdependent guidelines and policies and direction. As you can understand, managing and awarding such benefits is indeed a challenging exercise.

Managing Benefits – How do they do it?

So, the question now is how do defense services conventionally manage such complex benefits schemes? Here are two of the ways this is done.

Good Old Manual Determination

When using this method, you will have clerks who will be responsible for interpreting the guidelines as they apply for each member. As is obvious, the work here is labor intensive and involves absolutely no automation.

These clerks will be experts in benefits guidelines and bring long experience to their work. They will use published guidelines either in hard-copy format or in the form of a PDF or online to use as a reference in their daily decisioning.

Guidelines in Code (No or Semi Automation)

In some minority of cases, some of these guidelines are hardwired and hardcoded inside of application code.

Only those parts of the regulations that are simple are automated. But many of the regulations are very complex and have complex dependencies with others. These are not automated at all.

Examples of cases where such automation is possible are "Benefits Calculators". For an example, see here, https://www.hrc.army.mil/site/Reserve/soldierservices/retirement/survivorbenefitpaycalc.asp

Challenges with Conventional Methods of Benefits Management

As has been mentioned before, managing benefits schemes in a transparent and member friendly fashion is a tough challenge. Adding to this would be the challenges introduced by the conventional and old-fashioned methods of solving this challenge.

To understand the problem better, here is a summary of the problem situation to help us look at it with clarity.

The Guidelines & regulations for benefits management are essentially the business rules that drive decision making in this area. Examples of decisions are

1. What benefits to provide for a member going on a certain mission?

2. How to validate and verify claims from members against the appropriate regulations?

3. How to determine how much to be paid out for a specific member as benefits?

Manual decisions are inefficient and costly because

1. To handle large volumes, you need a large pool of trained expert clerks. This jacks up the cost of enforcing such regulations

2. The clerks will have to be experts in the 100s of rules & regulations. The probability of manual errors is very high. This can lead to disputes and/or act as a dampener of morale among the services personnel

3. Regulations change every year. To keep the clerks in all locations up to-date on the latest regulations in a costly exercise

4. Settling and validating claims can be a very cumbersome process as all the decisions are mainly manual and therefore are error-prone. This also means that the time taken to clear cases can be high.

Automating decisions as it relates to benefits management is hard because

1. The regulations and guidelines are very complex and cannot be automated or modeled using conventional programming techniques

2. Hard-coding Regulations inside applications leaves the "Business" blind to how the system takes decisions

3. IT cannot be responsible for the correctness of the guidelines enforced by the System. So, how do you involve the Business?

Solving the problem with Business Rules Management

Business Rules Management aims to provide a solution for exactly these kinds of challenges. For a good introduction to this topic, please refer to the following links

- Getting Started with Business Rules Management
- Why Business Rules are Not Software Requirements

To recap, we identified that the regulations in the area of benefits management are essentially the "***business rules***" that drive "***Decisioning***" in this area. Broadly, any solution to this challenge **MUST** provide at least for the following

1. Allow for Automating Complex Decisions as found in benefits management in an efficient and cost-effective fashion

2. Allow Business Users to "Look Into" the system and verify correctness of rules by representing the "rules & regulations" in a business user friendly representation

3. Must provide an easy way for business users to modify "rules & regulations" by themselves or with minimal IT help

4. Must be easy to use for IT to integrate with the main HR System of which benefits management is a part of.

Business Rules Management technology offers a clear and precise solution for solving these class of decision automation problems.

The table below summarizes the "***Hows & Whys***" of using a Business Rules Management solution for the specific problem of Benefits Management.

Solution with Business Rules Management	Benefit
Model Complex regulations using a BRM using various formats like a Decision Table, If Then Rules and so on	✔ Complex rules are modeled in a computer-readable fashion ✔ Regulations are modeled in a form that can be consumed by Business Users (Clerks) ✔ Externalize "Rules" from Application Code
Use a "Rule Engine" to automate complex Decisions in benefits management	✔ Automate all manual decisions in a precise and predictable fashion ✔ Get the same Decisions in all geographies and locations based on the same rules.
Rule Change Management	✔ Allow IT to Support Change Management of rules & regulations ✔ Allows Business Users to verity, control and drive changes to "rules & regulations" ✔ Manage all rules centrally. You get a single version of truth

Summary

Managing a complex array of benefits schemes in the Defense Organizations presents some tough and challenging problems.

Business Rules Management technology provides an innovative, cost-effective and business friendly technology to solve these problems. Automating, managing and aligning complex decisions in the topic of Benefits Management can be achieved using a Business Rules approach and through the use of a Rule Engine, while delivering agility, and dramatic reduction in maintenance & operational costs.

The proper administration of these benefits is a fundamental element to establishing an environment where Defense Organizations can "take care" of their people through fair, equitable and transparent processes.

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