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IMPLEMENTACIJA SISTEMA KALKULACIJE REZERV I PLAĆANJA U UPRAVLJANJU ODŠTETAMA U SAP ERP SISTEMU

ORIGINALNI NAUČNI RAD

Apstrakt

U ovom radu biće predstavljena implementacija SAP rešenja u oblasti osiguranja. Na početku -je dat osvrt na ERP sisteme i SAP, a fokus ovog rada je modul za upravljanje odštetama FS-CM *Claims Management*. Cilj rada je da predstavi informacioni sistem za složen proces isplate naknada, koji je jedan od ključnih procesa u radu osiguravajuće kuće. U implementaciji se nailazi na brojne izazove: na koji način automatizovati celokupan proces i kako integrisati sve sisteme koji su uključeni. Potrebno je ispratiti proces od kreiranja zahteva za odštetu, preko kalkulacije isplate i obrade zahteva, sve do krajnje isplate osiguraniku. Prikazano rešenje je integracija više modula i sistema unutar SAP-a kako bi proces mogao da se izvrši, kao i upotreba nekih SAP modula na drugačiji način od njihove standardne upotrebe. SAP kao ERP sistem je u mogućnosti da pruži ovakvu integraciju celokupnog procesa od početka do kraja.

Ključne reči: SAP, ERP sistemi, FS-CM *Claims Management*, upravljanje odštetama

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I Uvod

Svaki poslovni sistem se može opisati preko određene strukture i skupa poslovnih procesa koji se izvršavaju u okviru te strukture. Ukoliko se ovi procesi žele automatizovati potrebno je da se naprave odgovarajući informacioni sistemi koji će obezbediti da svaki poslovni proces, odnosno njegova aktivnost, bude što je moguće više automatizovana⁴. Iako informacioni sistemi stvaraju mnoge uzbudljive mogućnosti za preduzeća, oni su takođe izvor novih problema, pitanja i izazova za menadžere. Veliki softverski i hardverski sistemi i dalje ne uspevaju uprkos brzim naprecima u informacionoj tehnologiji.⁵

Povećanje efikasnosti, optimizacija troškova i resursa predstavljaju glavni zadatak menadžmenta. Samo oni poslovni sistemi koji su obezbedili smislen tok informacija i dobara u lancu snabdevanja, izvršno upravljanje odnosima sa klijentima i koji su primenili e-poslovanje, mogu ostvariti strategijsku prednost.⁶ Integrisana softverska rešenja, među kojima se ističu ERP sistemi, pomažu da se industrijska slika promeni.⁷ ERP sistem obuhvata module za sve ključne oblasti poslovanja, kao što su nabavka, proizvodnja, upravljanje materijalima, prodaja, marketing, finansije i ljudski resursi.

SAP je bio jedna od prvih kompanija koja je razvila standardni softver za poslovna rešenja i nastavlja da nudi vodeća ERP rešenja u industriji.⁸ Među brojnim kompanijama koje su implementirale SAP softversko rešenje, nalazi se i dosta osiguravajućih kuća. U osiguranju je potrebno upravljati složenim i raznolikim procesima koji uključuju upravljanje polisama, obračun premija, obradu šteta, aktuarstvo, kao i upravljanje rizicima. Potrebno je pratiti ogromnu količinu podataka o klijentima, ugovorima i regulatornim izveštajima. Često je neophodna integracija sa eksternim sistemima i bazama podataka. Ovo je razlog zašto ne postoji jedno gotovo poslovno rešenje koje može pokriti sve zahteve osiguravajućih kompanija. Umesto toga, neophodna je integracija više SAP modula i rešenja, i prilagođavanje specifičnim potrebama svakog klijenta. To ujedno predstavlja i najveći izazov implementacije SAP rešenja u oblasti osiguranja.

Ovaj rad bavi se jednim od vrlo bitnih procesa u upravljanju odštetama - sistemom kalkulacije rezervi i plaćanja. Cilj je podržati proces u celini, sa visokim

⁴ Bojan Jovičić, Siniša Vlajić, „Evolucija ERP sistema“, *ИИФОРМ*, 22/2007, 18-22.

⁵ Chetan S. Sankar, Karl-Heinz Rau, *Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons from a Real-World Case Study*, IGI Global, 2006, 2.

⁶ Dragana Rejman Petrović, „ERP sistemi u funkciji unapređenja kvaliteta poslovanja“, *Nacionalna konferencija o kvalitetu, Mašinski fakultet Univerziteta u Kragujevcu, Kragujevac*, 2009, A15-A22.

⁷ Thomas F. Wallace, Michael H. Krezmar, *ERP: making it happen: the implementers' guide to success with enterprise resource planning*, Hoboken, NJ, USA 2001, 4.

⁸ <https://www.sap.com/westbalkans/about/what-is-sap.html>, pristupljeno: 21. 8.2024.

stepenom automatizacije, kako bi se osiguralo što jednostavnije korišćenje rešenja od strane zaposlenih, olakšavajući im svakodnevne operacije i povećavajući ukupnu efikasnost poslovanja. U ovom radu je detaljno prikazano rešenje koje je implementirano na projektu. Svi prikazi iz sistema su originalne slike sa projekta, pa su zbog toga na holandskom ili engleskom jeziku.

II ERP sistemi

Sistemi za planiranje resursa preduzeća (ERP) imali su ogroman uticaj na preduzeća i organizacije širom sveta⁹. ERP sistemi se u većini slučajeva implementiraju s ciljem da poboljšaju neki aspekt organizacije, npr. strateški, organizacioni, poslovni, menadžerski, operativni ili IT-infrastrukturu.¹⁰ ERP sistem (eng. *Enterprise Resource Planning*) predstavlja softversko rešenje namenjeno upravljanju svim poslovnim funkcijama preduzeća. To je integrisani sistem koji povezuje sve delove organizacije, omogućava njihovu međusobnu koordinaciju i protok informacija između njih. Korišćenjem ERP sistema organizacija celokupno poslovanje vodi upotrebom jednog softvera i sve važne informacije čuva na jednom mestu.¹¹

Pored vodećih vlasničkih ERP sistema poput SAP-a i *Microsoft Dynamic-a*, na tržištu se primećuje prisustvo velikog broja ERP sistema otvorenog koda. Mala i srednja preduzeća često se opredeljuju za korišćenje ERP sistema otvorenog koda, a razlog za to su prvenstveno niski troškovi implementacije i održavanja.¹²

Strukturu ERP sistema najčešće čine kolekcije aplikacija. One su organizovane u funkcionalne oblasti, koje se nazivaju moduli. Naravno, postoje razlike između pojedinih ERP sistema po pitanju modula, što znači da svi ERP sistemi nemaju sva funkcionalna područja, niti uključuju uvek iste module,¹³

1. Prednosti ERP sistema

Bredford se u svojoj knjizi o modernim ERP sistemima osvrnula na prednosti i mane implementacije ERP sistema u preduzeću. Među glavnim prednostima je integracija podataka. U ERP sistemima, podaci se jednom prikupljaju i dele širom

⁹ Debra Howcroft, Duane Truex, „A critical analysis of ERP systems: the macro-level“, *The Database for Advances in Information Systems*, 4/2001, 13-18.

¹⁰ Jonas Hedman, Andreas Borell, The Impact of Enterprise Resource Planning Systems on Organizational Effectiveness: An Artifact Evaluation. In *Enterprise Resource Planning: Global Opportunities*, Hershey, PA: Idea Group Publishing, 2002, 78-96.

¹¹ Milena Ristić, „Šta je ERP – Značaj ERP rešenja u poslovanju preduzeća“, 2017, <https://beleske.com/sta-je-erp-znacaj-erp-resenja-u-poslovanju-preduzeca/>, pristupljeno: 10.8.2024.

¹² Dragana Maljković, Ognjen Pantelić, „Komparativna analiza ERP sistema otvorenog tipa“, *STED Journal*, 5/2019, 9-18.

¹³ D. Rejman Petrović, A16-A17.

preduzeća, smanjujući rizik od netačnosti i redundanse u podacima i eliminišući vreme izgubljeno na proveravanje, ponovnu proveru i usaglašavanje podataka.¹⁴ Jedna od posledica uvođenja ERP-a u kontekstu integracije je centralizacija. Preduzeće uvođenjem ovog sistema može da zameni dve ili više nezavisnih aplikacija i da eliminiše potrebu za spoljnim interfejsima, koji su ranije bili potrebni za spajanje ovih sistema.¹⁵ Za organizacije koje obrađuju velike količine podataka, njihov kvalitet je osnova uspeha organizacije.¹⁶ ¹⁷ Loš kvalitet podataka kompaniju može koštati i do 10% ili 20% ukupnih prihoda.¹⁸ Još jedna prednost ERP sistema je pristup informacijama u realnom vremenu, što poboljšava saradnju i komunikaciju širom preduzeća.

ERP sistem takođe zahteva da kompanija deli zajednički proces i model podataka koji pokriva složene operativne procese od početka do kraja, kao što su oni koji se nalaze u proizvodnji i lancu snabdevanja. Ova standardizacija poboljšava koordinaciju unutar organizacije i širom organizacije, čineći lakšim interakciju sa unutrašnjim i eksternim zainteresovanim stranama. ERP dobavljači dizajniraju svoja rešenja oko procesa zasnovanih na industrijskim najboljim praksama.

Na kraju, ERP sistemi mogu smanjiti operativne troškove i povećati prihode. Kompanije koje implementiraju ERP to rade kako bi postigle efikasnosti kao što su niži troškovi zaliha, proizvodni troškovi ili troškovi nabavke.

2. Nedostaci ERP sistema

Implementacija ERP sistema uključuje mnogo više od jednostavne instalacije gotovog softvera. To je složen, vremenski zahtevan poduhvat, koji može uključivati mnoštvo problema. Mnogi od problema na koje se nailazi tokom implementacije odnose se na takozvani *soft stuff* (ljudski faktor) za razliku od *technical stuff* (softver/hardver problemi). Nedostatak učešća zaposlenih može biti problem ako zaposleni nisu edukovani o motivaciji organizacije za ulaganje u ERP sistem ili ako njihova mišljenja i povratne informacije nisu uzeti u obzir tokom procesa implementacije. Ponekad se ERP sistemi susreću sa otporom jer zaposleni mogu biti prilično zadovoljni starim sistemima koje su koristili decenijama.

Još jedan nedostatak ERP sistema je njihova visoka cena, posebno za softver od poznatih, većih ERP dobavljača, kao što su SAP i Oracle. ERP sistem i njegov proces implementacije mogu biti najskuplja investicija koju kompanija može napraviti. Manje

¹⁴ Marianne Bradford, *Modern ERP: Select, implement and use today's advanced business systems*, third edition, Morrisville, NC, USA 2015, 6-9.

¹⁵ B. Jovičić, S. Vlajić, 18-20.

¹⁶ Stuart Madrik et al., „Overview and Framework for Data and Information Quality Research“, *Journal of Data and Information Quality*, 1/2009, 1-22.

¹⁷ Heinrich Bernd, Marcus Kaiser, Klier Mathias, „Does the EU insurance mediation directive help to improve data quality? A metric-based analysis“, *ESCIS Proceedings*, 195/2008, 1871-1882.

¹⁸ Thomas Redman, „Data: An unfolding quality disaster“, *Dm Review*, 14/2004, 21-23.

kompanije generalno imaju niže troškove implementacije, ali mogu iskusiti iste vrste implementacionih problema. ERP sistem zahteva stalno održavanje kako bi zadržao svoju stabilnost i kompatibilnost sa širokim spektrom stalno promenljivih softverskih aplikacija. Standardizacija poslovnih procesa koja se razmatra kao prednost takođe može biti i nedostatak ako ova struktura odstupa ili je u suprotnosti sa kulturom ili očekivanjima firme.

Iz ovih razloga, i mnogih drugih, kompanije ne bi trebalo da donose odluku o implementaciji ERP sistema olako. Uspešna implementacija zahteva da svi zaposleni — od funkcionalnih korisnika i IT osoblja, do najvišeg rukovodstva — budu motivisani da blisko sarađuju u cilju unapređenja misije organizacije.¹⁹

3. Budućnost ERP sistema

Budućnost ERP sistema je u donošenju efikasnosti, skalabilnosti i brzine u poslovanje. Klasični ERP sistemi moraju evoluirati, integrišući tehnologije poput senzora i veštačke inteligencije (AI). Budući ERP sistemi moraju biti prilagodljivi i skalabilni, uz primenu analitike i mašinskog učenja. Takođe, tradicionalni ERP sistemi su dizajnirani kao lokalna (*on-premise*) rešenja, tako da moraju izvršiti tranziciju na *cloud* sisteme. *Cloud* tehnologija omogućava korisnicima pristup ovim resursima putem interneta, što donosi brojne prednosti, uključujući skalabilnost, pristupačnost, uštedu troškova, lako održavanje i ažuriranje, te poboljšanu bezbednost. Tranzicija na *cloud* omogućava ERP sistemima da budu agilniji, efikasniji i spremni za buduće izazove.²⁰ Jedna od glavnih prednosti ERP sistema zasnovanih na *cloudu* jeste mogućnost da obezbede pristup podacima i analitiku u realnom vremenu. U jednoj studiji slučaja o upravljanju rizicima u lancu snabdevanja, otkriveno je da praćenje u realnom vremenu ERP sistemima zasnovanim na *cloudu* poboljšava sposobnost proaktivnog upravljanja rizicima.²¹

Otpornost snabdevanja postala je veoma važna za proizvođače. Naglašava se sposobnost lanca snabdevanja ne samo da izdrži, već i da se prilagodi i oporavi od nepovoljnih događaja, čime se osigurava kontinuirani učinak i konkurentska prednost.²² U godini kada je izbio COVID-19, proizvođači su bili suočeni s velikim prekidama u snabdevanju i bili prinuđeni da razviju brze proizvodne odgovore. Ova kriza je otkrila potrebu za povećanjem otpornosti snabdevanja kako bi industrijske organizacije mogle efikasno da se prilagode prekidima koji mogu nastati, ublažavajući rizike povezane s neuspesima u snabdevanju. To uključuje, na primer, prikupljanje i analizu podataka

¹⁹ M. Bradford, 6-9.

²⁰ Zahoor Syed *et al.* (2024) "Enhancing supply chain resilience with cloud-based ERP systems", *IRE Journals*, 8(2), 106-128

²¹ Wennan Zhang *et al.*, "Digital-Twin Enabled Construction System For Supply Chain Risk Management.", 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023, 1-6.

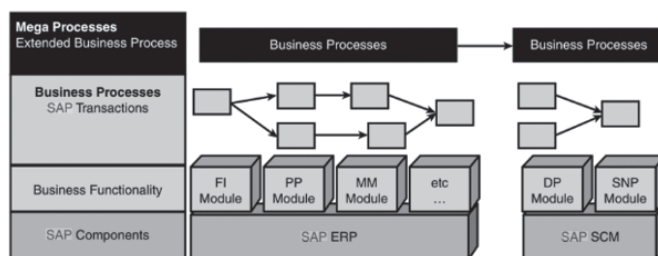
²² Timothy J. Pettit, Keely L. Croxton, Joseph Fiksel, "The Evolution of Resilience in Supply Chain Management: A Retrospective on Ensuring Supply Chain Resilience," *Journal of Business Logistics*, br.40/2019, 56-65.

o različitim faktorima koji mogu uticati na snabdevanje, kao što su prirodne katastrofe, geopolitički događaji, kašnjenja u prevozu i rizici od dobavljača. U tu svrhu, ERP sistemi mogu prikupljati podatke u realnom vremenu iz više izvora, uključujući senzore, IoT (*Internet of Things*) uređaje i spoljne izvore podataka. Analiza ovih podataka može pružiti rane signale upozorenja i omogućiti proaktivno donošenje odluka.²³

III SAP ERP sistem

SAP je osnovan pre skoro 40 godina u Manhajmu (Nemačka), od strane grupe bivših inženjera IBM-a. Ideja je bila da se kompanijama pomogne da zamene 10 ili 15 različitih poslovnih aplikacija - kao što su finansijski sistemi (vođenje računa o plaćanjima i potraživanjima), aplikacije za skladištenje, rešenja za planiranje proizvodnje, sistemi za održavanje postrojenja i tako dalje - sa jedinstvenim integrisanim sistemom. Ova vizija je postala stvarnost kada su *Systems, Applications and Products in Data Processing* (SAP) otvorili svoja vrata 1972. godine. Danas, SAP koristi više od milion poslovnih korisnika koji rade za više od 100.000 klijenata u preko 120 zemalja.

Važno je razumeti razlike između SAP komponenti, modula i transakcija. SAP koristi termin komponente naizmenično sa terminom poslovna aplikacija, a većinu vremena se ovaj poslednji termin skraćuje na aplikacija. S druge strane, SAP moduli pružaju specifičnu funkcionalnost unutar komponente. Finansijski modul, modul za planiranje proizvodnje i modul za upravljanje materijalima su dobri primeri koji se lako mogu objasniti. Ovi pojedinačni SAP moduli se kombinuju da bi formirali SAP ERP komponentu. Unutar određenog modula se konfiguriraju i sklapaju poslovni procesi kompanije. Poslovni procesi se takođe nazivaju poslovni scenariji. Poslovni proces može zahtevati da se transakcije izvršavaju u nekoliko različitih modula, možda čak i iz nekoliko različitih komponenti²⁴, što je prikazano na Slici 1.



Slika 1. SAP komponente, moduli i transakcije²⁵

²³ <https://www.itexchangeweb.com/blog/the-future-of-erp-systems/>, pristupljeno: 13.8.2024.

²⁴ George Anderson, *Sams teach yourself SAP in 24 hours*, fourth edition, Carmel, IN, USA 2011, 8-10.

²⁵ G. Anderson, 8-10.

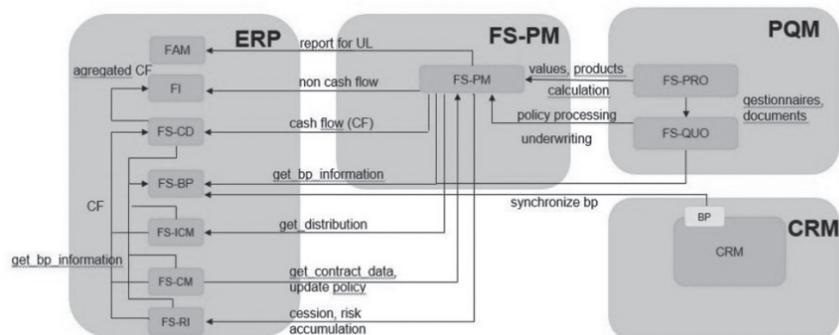
IV SAP za osiguranje

SAP za osiguranje je sveobuhvatan paket koji pokriva funkcionalnosti potrebne za podršku procesima specifičnim za osiguranje. Ovaj paket se može integrisati sa SAP i ne-SAP *front i back office* rešenjima, a sastoji se od različitih modula:

- FS-PRO *Product Lifecycle Management for Insurance* modul je odgovoran za modelovanje struktura proizvoda i održavanje svih aktuarskih proračuna, pravila tarifriranja i formula koje treba koristiti.
- FS-QUO - *SAP Quotation and Underwriting for Insurance* koristi se za pravljenje osiguravajućih ponuda. FS-PQM je naziv za kombinaciju FS-PRO i FS-QUO.
- FS-PM *Policy Management* komponenta se koristi za administraciju osiguravajućih polisa, od njenog početka i tokom celog životnog ciklusa polise. To je centralna komponenta SAP-a za osiguranje.
- FS-CM *Claims Management* je odgovoran za upravljanje potraživanjima od njihovog registrovanja do rešenja. Direktno je integrisan sa sistemima za plaćanje kako bi obrada potraživanja mogla biti obavljena sve do isplate klijentu.
- FS-CD *Collections & Disbursements* modul se koristi za rukovanje svim dolaznim i odlaznim uplatama osiguravajuće kompanije. Premije ili isplate odšteta se automatski prate i sve je integrisano sa bankarskim interfejsom za usklađivanje uplata.
- FS-ICM *Incentive and Comission Management* koristi se za rukovanje svim podacima o posrednicima i agentima i izračunava odgovarajuće provizije koje posrednici zarađuju.
- FS-RI *Reinsurance Management* upravlja svim procesima reosiguranja i potpuno je integrisan sa gore objašnjenim modulima osiguranja.

Svaki od modula može se kupiti i koristiti pojedinačno, iako je najbolja praksa koristiti ih zajedno kao potpuno integrisano SAP rešenje za osiguranje,²⁶ kao na Slici 2.

²⁶ <https://s4ic.com/sap-for-insurance/>, pristupljeno: 25. 8. 2024.



Slika 2. Integracija modula²⁷

V Modul za upravljanje odštetama

FS-CM *Claims Management* se koristi za upravljanje odštetama, odnosno potraživanjima, od trenutka obaveštenja do ispunjenja zahteva. Glavni procesi u okviru upravljanja odštetama su:

- Obaveštenje o potraživanju – *Claim Notification*
- Obrada odštete - *Claim Handling*
- Ispunjenje odštete – *Claim Fulfillment*
- Povraćaj potraživanja – *Claim Recovery*

Modul za upravljanje polisama (FS-PM) agregira podatke relevantne za proviziju i šalje ih modulu za obračun provizija (FS-ICM). FS-ICM će pokrenuti modul za upravljanje isplatama (FS-CD) da kreira uplatu za proviziju. Isti princip važi za interfejs između FS-PM i FS-CD, gde FS-PM kreira sve novčane tokove i šalje ih u FS-CD. U slučaju da dođe do potraživanja, modul za upravljanje odštetama (FS-CM) će pozvati FS-PM da zatraži podatke o polisi, takozvani *snapshot* polise. U tom slučaju, FS-CM će pozvati ugrađenu funkcionalnost u FS-PM da prikupi relevantne podatke o osiguravajućoj polisi koji su dalje potrebni za kreiranje i obradu potraživanja. Kada se potraživanje obradi, FS-CM će pozvati FS-CD da kreira odlaznu uplatu kako bi se korisniku nadoknadila šteta koja je nastala.²⁸

²⁷ S4IC, SAP for Insurance: how do the modules work together?, 2022, <https://www.linkedin.com/pulse/sap-insurance-how-do-modules-work-together-s4ic/>, pristupljeno: 25. 8. 2024.

²⁸ S4IC, SAP for Insurance: how do the modules work together?, 2022.

VI Proces kalkulacije rezervi i izvršenje plaćanja

Proces plaćanja implementiran u SAP-u za osiguravajuću kuću uključuje sledeće module:

- FS-CM *Claims Management* – sistem za upravljanje odštetama
- HCM *Human Capital Management* – sistem za upravljanje ljudskim kapitalom
- CD *Collections & Disbursements* – upravljanje naplatom i isplatama finansijskih usluga
- FICO *Financial Accounting and Controlling* – sistem za upravljanje finansijskim podacima, generisanje i analizu finansijskih izveštaja
- IA *Insurance Analyzer* – sistem za upravljanje finansijskim rizikom.

1. Kreiranje zahteva za odštetu u SAP sistemu

Proces počinje kreiranjem zahteva za odštetu (eng. *Claim*) u SAP sistemu. Transakcija ICLCDC01 je standardna transakcija u SAP-u za kreiranje odštete za osiguranje. Pored te standardne transakcije, moguće je napraviti i proizvoljne transakcije. ZICL_SZ_CDC01 je transakcija koja se koristi za kreiranje odštete na posmatranom projektu, kada je u pitanju potraživanje zbog nemogućnosti obavljanja posla. Na Slici 3 vidimo ekran za kreiranje odštete. Potrebno je da korisnik unese sistem za polise, kao i broj polise osiguranja. Obavezna polja su još i datum kada se podnosi zahtev za odštetu i datum od kog kreće potraživanje.

Za svaku odštetu se čuva vremenska linija, tj. hronološki se beleži kada je osiguranik (SAP *business partner*) po istom osnovu tražio odštetu. Potrebno je uneti procentualnu vrednost koja predstavlja stepen u kom osiguranik nije u mogućnosti da obavlja posao, kao i kod koji označava medicinski razlog za to. Na osnovu tog procenta vrši se obračun naknade. Na Slici 4 se nalazi prikaz ekrana sa vremenskom linijom i neophodnim poljima za kreiranje odštete.

Nakon što je odšteta sačuvana, ta vremenska linija mora biti odobrena od strane rukovodioca odštetnog zahteva.

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Claim Edit Goto Unlink System Help

< SAP

Create Claim : Initial Screen SZ

✓ [] [] [] [] Cancel

Insured Person

PSN [] of Insured Person []

Policy Search

Polcysystem ZI_PMPRT FSPM AOV []
 Policy 300713439 []

Claim Information

Date of Loss 15042024 [] ☒ Date Estimated

Meldingsgegevens

Datum Melding 15042024 []

Verlengde Regie

☐ 42e weekmelding VR []

Preventie

☐ AOV Preventie claim []

Slika 3. Kreiranje zahteva za odštetu.

Claim Edit Goto Utilities System Help

Claim Overview

Contract Information 300713439

ADV voorval

PH: Milan R Petrovic/4907 XE Ooster

Insd: Milan R Petrovic

Payments and Reserves

Claimoverstijgende notices

Hoofddiag (Open)

Inzet derden & betalingen (Open)

Verzuim overzicht

Intervente

Interne arbeidsdeskundige

Incidentele Opdrachten

Betaling declaraties (0)

AOV voorval Strategie Melding details - overzicht Aanvraag zwangerschapstuit. Protest Beperkingenpatroon Bijzonder verval

AOV tijdfijn

Valid From Valid-To Date Stat. Oo. Red. Overlijden CAS-code CAS-code Description Coulan. Tijd Pol.Stat.

15.04.2024	31.12.9999	Draft	1C	15	A			
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AOV kopgegevens

Geldig van 15.04.2024 Geldig tot en met 31.12.9999

Mutatiesoort HM Handm. Status Draft

AOV gegevens

AO percentage - gemeld	100,00
AO percentage - geaccepteerd	100,00

Datum gemeld 15.04.2024

Oorzaak

Acc. reden 15 Vaststellen

Uitkering J Ja

CAS-code 1 A

CAS-code 2

Description

Slika 4. Kreiranje vremenske linije.

2. Kalkulacija rezervi za odštetu

Kreiranje rezervi u osiguravajućoj kompaniji je jedan od načina upravljanja rizikom, jer obezbeđuje da kompanija ima dovoljno sredstava za isplatu budućih obaveza prema osiguranicima. Potrebno je izvršiti obračun rezervi za neplaćene štete, kao i za buduće štete. Za ovo se koriste kompleksni matematički i statistički modeli.

Aktuarska rezerva se sastoji od sledećih rezervi:

- Rezerva za obaveze po osnovu potraživanja, koja se takođe naziva i rezerva za štete ili rezerva za neplaćene štete;
- Rezerva za premijske obaveze;
- i rezerva za druge obaveze²⁹

Na našem primeru, za obračun rezervi koristi se program implementiran za potrebe konkretnog projekta, odnosno ne koristi se unapred predefinisani program SAP paketa. Programima se u SAP-u pristupa preko transakcije SE38. Za željeni program potrebno je uneti odgovarajuće parametre, npr. broj zahteva za potraživanje, a potom se program izvršava.

Rezultat izvršenja programa za obračun rezervi su rezerve sačuvane u korisničkoj tabeli ZICLD_SZ_KASSTRO, i na Slici 5 možemo videti strukturu tabele. Beleže se sve potrebne informacije: broj odštete, *timestamp* obračuna, polja RES_G_CLAIM i RES_G_EXPERTISE predstavljaju iznose.

Za odštetu sa brojem QS00624006 u tabeli na Slici 6 vidimo pregled novčanih rezervi po mesecima, za sve godine kada osiguranik ima pokriće.

U primeru koji ćemo dalje posmatrati nije izvršena kalkulacija rezervi, tako da će proces krenuti sa iznosom rezervi 0 EUR.

²⁹ <https://www.axxima.ca/blog/actuaries-and-annual-reserving-work-what-you-need-to-know/>, pristupljeno: 30. 8. 2024.

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Transparent Table	ZICLD_SZ_KASSTRO	Active
Short Description	Cash Flow	
Attributes	Delivery and Maintenance	Fields
Input Help/Check	Currency/Quantity Fields	
Field	Key	Initi...
CLIENT	☒	☒ MANDT
CLAIM	☒	☒ ICL_CLAIM
LOB_NAME	☒	☒ Z_SZ_CF_LOBNM
INJURY_YR	☒	☒ Z_SZ_DTE_INJURY
CASH_FLOW_DT	☒	☒ Z_SZ_CF_DATE
INCLUDE	☐	☐ ICL_INCL_VERS
CHANGETIME	☐	☐ ICL_CHANGEUTC1
CHANGEDBY	☐	☐ ICL_CHANGEDBY
DELETED	☐	☐ ICL_RECSTATUS
INCLUDE	☐	☐ ICL_INCL_ORG3
CREATEDBY	☐	☐ ICL_CREATEDBY
CREATETIME	☐	☐ ICL_CREATEUTC
RES_G_CLAIM	☐	☐ Z_SZ_DISTR_G_FIL
RES_C_EXPERTISE	☐	☐ Z_SZ_DISTR_C_FIL
INFLATION_REGIME	☐	☐ Z_SZ_INFLTN_REG

Slika 5. Struktura tabele za rezerve.

Data Browser: Table ZICLD_SZ_KASSTRO Select Entries 19									
Table: ZICLD_SZ_KASSTRO									
Displayed Fields: 13 of 13									
CLIENT	CLAIM	LOB_NAME	INJURY_YR	CASH_FLOW_DT	CHANGETIME	CHANGEDBY	DELETED	CREATEDBY	CREATETIME
030	0500624006	SAP_ADV	2023	01.07.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.08.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.09.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.10.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.11.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.12.2023	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.01.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.02.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.03.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.04.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.05.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.06.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.07.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.08.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.09.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.10.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.11.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.12.2024	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124
030	0500624006	SAP_ADV	2023	01.01.2025	20.230.628.112.124	AA626040	0	AA626040	20.230.628.112.124

Slika 6. Primer rezervi

3. Kreiranje plaćanja u SAP sistemu

Na zahtevu za odštetu koji ima odobrenu vremensku liniju, moguće je izvršiti obračun naknade po zahtevu, i potom izvršiti plaćanje. Kada je vremenska linija odobrena, na zahtevu se prvo pojavljuje dugme za obračun naknade, a nakon što je naknada obračunata, umesto njega dugme za obavljanje plaćanja. U pozadini se pozivaju kompleksni funkcionalni moduli za finansijske obračune. Kao rezultat, imamo izmene na vremenskoj liniji i novi čvor za plaćanja, u stablu za navigaciju, prikazane na Slici 7.

Valid From	Valid To Date	Stat	Oorz	Reden Overlijden	CAS-code 1	CAS-code 2	Description	Couance	Tijd	Pol	Stat
01.09.2024	31.12.9999	Active	0,00	15	A						
01.08.2024	31.08.2024	Active	0,00	15	A						
01.07.2024	31.07.2024	Active	100,00	15	A						
01.06.2024	30.06.2024	Active	100,00	15	A						
01.05.2024	31.05.2024	Active	100,00	15	A						
15.04.2024	30.04.2024	Active	100,00	15	A						

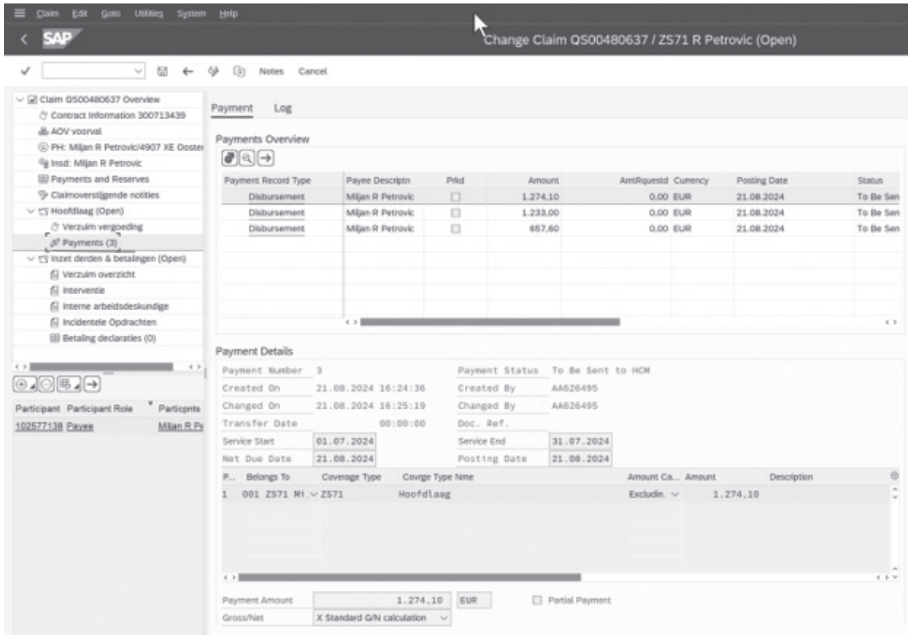
Slika 7. Obračun naknade i kreiranje plaćanja.

Na ekranu za plaćanja vodi se evidencija o svim plaćanjima na odšteti: koji je tip plaćanja (isplata ili refundacija), koji je iznos, u kojoj valuti se vrši isplata ili refundacija, kao i njen trenutni status. Na osnovu statusa refundacije prati se da li je još uvek u sistemu za odštete, kada je poslata u sistem za obračune, kada je poslata u sistem za plaćanja. Još jedan bitan podatak koji se ovde beleži je i broj dokumenta. Taj dokument sadrži listing plaćanja po bankovnim računima, na strani sistema za finansije i kontrolu (FICO). Na zahtevu za odštetu prikazanom na Slici 8 postoje plaćanja za tri meseca.

U SAP sistemu kreirana je korisnička tabela ZCM_RESERVE u kojoj se mogu pratiti sve promene u plaćanjima i rezervama na nekom zahtevu za odštetu (Slika 9). Ova tabela nije standardna tabela u SAP sistemu, već je napravljena za potrebe osiguravajuće kuće, kako bi se pratili svi relevantni podaci prilikom plaćanja, a koji nisu dostupni u standardnoj SAP tabeli. U toj tabeli su detaljnije prikazane sume i kretanje toka novca. Neki od bitnih podataka koji se beleže u ovoj tabeli su:

1. *Reserve type* – različiti tipovi rezervi se šalju u različite sisteme za obradu
2. *Reserve lot* – broj serije za obradu
3. *Document ref* - broj dokumenta u sistemu za plaćanja
4. *Change Reason* - postoje različiti razlozi izmene sume: plaćanje, usklađivanje iznosa, različite vrste izmena u zavisnosti od tipa refundacije i drugi.
5. Poslednje tri kolone odnose se na konkretne iznose: prva kolona predstavlja izmenu u plaćanju, druga kolona predstavlja izmenu u nivou rezervi, i poslednja kolona predstavlja bilans rezervi.

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Slika 8. Ekran za plaćanja.

Table Entry Help Settings **Table Entry** Environment Help

Data Browser: Table ZCM_RESERVE Select Entries 2

Table: ZCM_RESERVE List Width 6250

Fixed Columns:

SUBC	RESYTHP	CURR	CHANGENR	CHANGTIME	CHANGVER	RELETD	CRATETIME	GROSSRES	CHANGREASON	RESERVELOT	INDRES	DOCUMENTFNR	PAYMDUSTART	RESADJAMT	REBESAMT
001	56	EUR	000001	20.240.821.221.623	AA626495	0	20.240.821.142.430	3.164.70	03	000000000313	000043	00000000843	0.00	3.164.70	3.164.70
001	56	EUR	000001	20.240.821.221.623	AA626495	0	20.240.821.142.430	3.164.70	03	000000000313	000020	00000000843	3.164.70	3.164.70	0.00

Slika 9. Tabela ZCM_RESERVE.

Za tri plaćanja koja su izvršena ukupna suma je 3.164,70 EUR. Na primeru ove odštete nije izvršen obračun rezervi, pa je stanje rezervi jednako nuli. S obzirom na to da je prvobitno stanje rezervi 0 EUR, potrebno je povećati rezerve kako bi bilo moguće izvršiti plaćanje. Prvi red u tabeli, sa razlogom za izmenu '00' predstavlja usklađivanje rezervi, na iznos koji je potreban za isplatu. Drugi red u tabeli je isplata te sume, i smanjenje rezervi na nulu.

4. Okidači u SAP-u

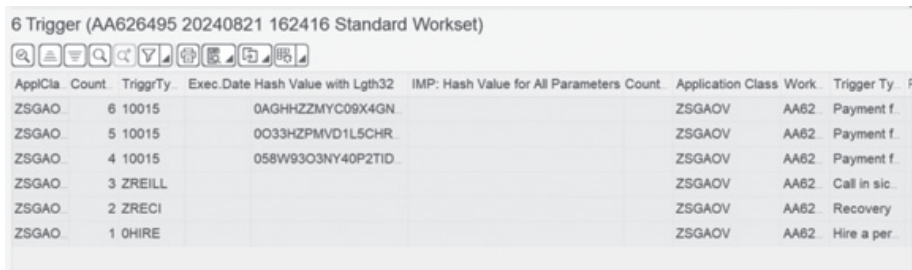
Transakcija IMP_MANAGER pokreće program za upravljanje okidačima. Koristi se za manipulaciju transportnim objektima, gde se objekti kreiraju i na njima vrše

izmene u jednom okruženju (npr. na sistemu za testiranje odšteta) i zatim prenose u drugo okruženje (npr. u sistem za upravljanje finansijama). Okidači predstavljaju neke automatske akcije prilikom transporta ovih objekata iz jednog okruženja u drugo. Grupisani su u aplikacione klase, prema funkcionalostima. Nakon što su okidači kreirani, potrebno je odrediti objekte, na primer biznis partner ili odšteta na koju se odnose, a potom se okidači i izvrše.

Prilikom kreiranja zahteva za odštetu i plaćanja, kreira se i nekoliko okidača:

- OHIRE okidač - vezan je za osiguranika, i prilikom obrade u sistemu za plaćanja osiguranik dobija jedinstven broj na osnovu ovog okidača
- ZRECI - okidač za oporavak osiguranog lica
- ZREILL - okidač za zdravstveni problem osiguranog lica
- 10015 - po jedan okidač se kreira za svaki mesec plaćanja, u ovom slučaju to su tri okidača

Ova tri okidača za plaćanja će nastati tek nakon što se plaćanja iz sistema za odštete pošalju u sistem za plaćanja, korišćenjem posebnog programa. U SAP sistemu pristup programima se vrši preko transakcije SE38. Pomenuti okidači ne prave nikakve promene u sistemu za odštete, ali su neophodni za obradu odštete u sistemu za plaćanja. Na Slici 10 prikazani su okidači za odštetu koja se obrađuje u ovom primeru.



6 Trigger (AA626495 20240821 162416 Standard Workset)									
AppClas	Count	TriggTy	Exec.Date	Hash Value with Lgth32	IMP: Hash Value for All Parameters	Count	Application Class	Work	Trigger Ty
ZSGAO	6	10015		0AGHHZ2MYC09X4GN			ZSGAOV	AA62	Payment f.
ZSGAO	5	10015		0033HZPMVD1L5CHR			ZSGAOV	AA62	Payment f.
ZSGAO	4	10015		058W9303NY40P2TD			ZSGAOV	AA62	Payment f.
ZSGAO	3	ZREILL					ZSGAOV	AA62	Call in sic
ZSGAO	2	ZRECI					ZSGAOV	AA62	Recovery
ZSGAO	1	OHIRE					ZSGAOV	AA62	Hire a per

Slika 10. Okidači za odštetu QS480637.

5. Obračun neto isplate

HCM (*Human Capital Management*) - upravljanje ljudskim kapitalom, odnosi se na skup aplikacija koje se koriste za regrutovanje, upravljanje i razvoj radne snage jedne organizacije. Ovaj softver se odnosi na sisteme koji doprinose optimizaciji procesa, i često se i naziva sistemom za upravljanje ljudskim resursima (HRMS - *Human Resource Management System*).

Neke od funkcionalnosti su:

- upravljanje iskustvom zaposlenih
- obračun plata

- analiza ljudskih resursa i planiranje radne snage.³⁰

Iz ove navedene definicije, kao i funkcionalnosti, može se videti da HCM nije deo standardnog SAP paketa za osiguranje. Nije čest slučaj da je HCM modul implementiran u osiguravajućoj kući. Međutim, za potrebe osiguranja i konkretnog projekta, ovaj sistem je implementiran tako da se ne bavi samo upravljanjem ljudskim resursima. U procesu plaćanja, HCM se koristi za obračun neto iznosa za isplatu.

Okidače koji su kreirani u prethodnom koraku procesa HCM izvršava, pri čemu se za svakog osiguranika (SAP *business partner*) kreira ID (identifikacioni broj) u tom sistemu. Rezultat programa izvršenih u ovom sistemu je neto specifikacija plaćanja, koja se šalje sistemu za upravljanje odštetama. Za svaki mesec se isplate obrađuju pojedinačno. Na slici 11 nalazi se neto obračun za mesec jun. Slično izgledaju i obračuni za maj i jul.

Iz HCM sistema se ovaj obračun dalje šalje u CD sistem koji je zadužen za obavljanje isplata.

Uitkeringsspecificatie Juni 20241

***** DIT IS EEN VOORBEELD GUS UITKERINGSSTROOK. NIET VOOR KLANTEN! *****

Dhr. R. Petrovic
Lijndonk 31
4907 XE Oosterhout

Achmea S&I Letsel
Laan van Malkenschoten 20
7333 NP Apeldoorn

PIG-nummer 40033882
Geb.datum 12.12.1986

	<u>Tabelloon</u>	<u>Bijz. bel.</u>	<u>Uitbetaling</u>
AOV Uitkering	1.233,00		1.233,00
Basis LH	1.233,00		
Loonheffing	455,83-		455,83-
WN-premie ZVW totaal			65,59-
Nettoloon			711,58
Te betalen bedrag			711,58

Slika 11. Neto obračun za mesec jun.

VII Kreiranje refundacije u SAP-u

U sistemu za upravljanje odštetama refundacija nastaje kada dođe do promene procenta koji označava u kojoj meri osoba nije u mogućnosti da obavlja svoj posao. Na primeru koji posmatramo, krenuli smo sa 100%. Ukoliko taj proce-

³⁰ <https://www.sap.com/westbalkans/about/what-is-sap.html>, pristupljeno: 30. 8. 2024.

nat smanjimo na, na primer 0%, odnosno osiguranik je opet sposoban da obavlja svoj posao, potrebno je izvršiti refundaciju za period za koji je procenat izmenjen. U prikazanom primeru, procenat je promenjen na nulu od 15.06.2024., tako da se kreiraju refundacije za dva meseca: jun i jul. Plaćanja nisu postojala u avgustu, tako da za taj mesec nema ni refundacije. Nova vremenska linija prikazana je na Slici 12.

AOV tildlin

Valid From	Valid-To Date	Stat.	Oorz.	Reden	Overlijden	CAS-code 1	CAS-code 2	Description	Couance	Tijd	Pol.Stat.
☐ 01.09.2024	31.12.9999	Active	0,00	15		A					
☐ 01.08.2024	31.08.2024	Active	0,00	15		A					
☐ 01.07.2024	31.07.2024	Active	0,00	15		A					
☐ 15.06.2024	30.06.2024	Active	0,00	15		A					
☐ 01.06.2024	14.06.2024	Active	100,00	15		A					
☐ 01.05.2024	31.05.2024	Active	100,00	15		A					
☐ 15.04.2024	30.04.2024	Active	100,00	15		A					

Slika 12. Vremenska linija nakon izmene.

Ekran za plaćanja na Slici 13 sada prikazuje dva nova reda za refundacije sa statusom Parkirano (*Parked*).

SAP

Change Claim Q500480639 / Z571 R Petrovic (Open)

Payment Log

Payments Overview

Payment Record Type	Payee Description	Paid	Amount	Antikquestid	Currency	Posting Date	Status
Refund	Ogjen R Petrovic	☒	0,00	2.547,89	EUR	28.08.2024	Parked
Refund	Ogjen R Petrovic	☒	0,00	1.315,04	EUR	28.08.2024	Parked
Disbursement	Ogjen R Petrovic	☐	2.547,89	0,00	EUR	27.08.2024	Execute Payment
Disbursement	Ogjen R Petrovic	☐	2.485,70	0,00	EUR	27.08.2024	Execute Payment
Disbursement	Ogjen R Petrovic	☐	1.315,04	0,00	EUR	27.08.2024	Execute Payment

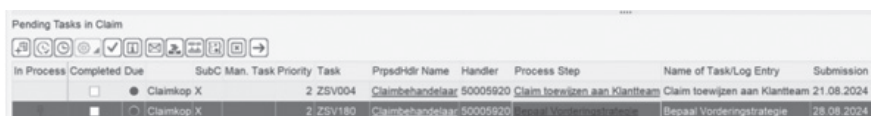
Payment Details

Payment Number 5		Payment Status Parked	
Created On	28.08.2024 13:58:46	Created By	AA626495
Changed On	00:00:00	Changed By	AA626495
Transfer Date	00:00:00	Doc. Ref.	
Service Start	01.07.2024	Service End	31.07.2024
Net Due Date	18.09.2024	Posting Date	28.08.2024

Slika 13. Refundacije na ekranu za plaćanja.

1. Procesiranje refundacije

Kreiranjem refundacije pojavljuje se zadatak koji treba da obavi rukovodilac za obradu štete, koji se može videti na Slici 14.



In Process	Completed	Due	SubC	Man.	Task	Priority	Task	PrpsdHdtr	Name	Handler	Process Step	Name of Task/Log Entry	Submission
☐	☒				Claimkop X	2	ZSV004	Claimbehandler	50005920	Claim toewijzen aan Klantteam	Claim toewijzen aan Klantteam	Claim toewijzen aan Klantteam	21.08.2024
☐	☐				Claimkop X	2	ZSV180	Claimbehandler	50005920	Bepaal Vorderingstrategie	Bepaal Vorderingstrategie	Bepaal Vorderingstrategie	28.08.2024

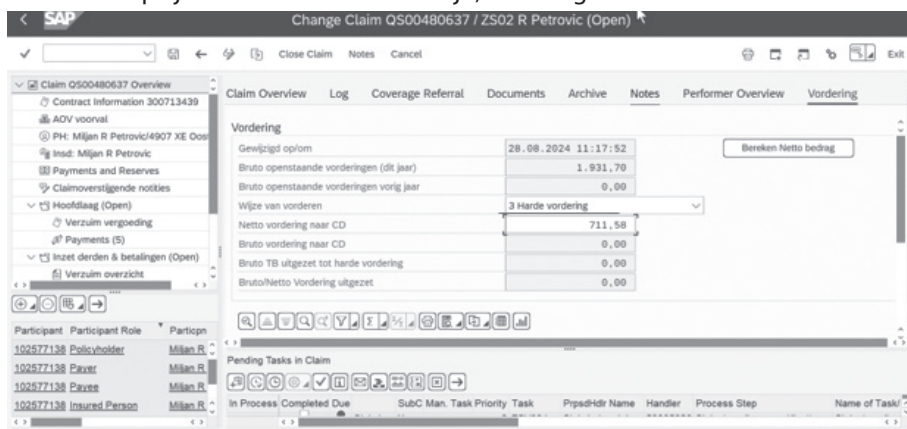
Slika 14. Zadaci u SAP-u.

Koncept zadataka (*tasks*) u SAP-u je vrlo jednostavan i predstavlja isto što i u svakodnevnom životu: zahtev da osoba izvrši neku akciju. Mogu biti automatski kreirani, kao zadatak u ovom primeru, ali i manuelno. Zadatak ZSV180 treba da ispunji rukovodilac odštete. Kada klikne na *process step* biće preusmeren na ekran za refundacije, na kom treba da nastavi proces refundacije. U zavisnosti od izbora tipa refundacije, menjaju se i polja na ekranu, s obzirom na to da su za različite tipove refundacije potrebni različiti podaci. Dalji proces obrade teče isto.

Tipovi refundacije su:

1. Maksimalni obračun – vrši se refundacija celokupnog iznosa
2. Obračun sa iznosom otplate – obračun refundacije na rate
3. Direktna refundacija – refundacija celokupnog neto iznosa
4. Oslobođanje od plaćanja – osiguranik može biti oslobođen vraćanja dela iznosa ili celokupnog iznosa.

Na ovom primeru refundacija će biti procesirana kao direktna refundacija. Odabirom opcije 3 za direktnu refundaciju, ekran izgleda kao na Slici 15.



Change Claim QS00480637 / ZS02 R Petrovic (Open)

Close Claim Notes Cancel

Claim Overview Log Coverage Referral Documents Archive Notes Performer Overview Vordering

Vordering

Gewijzigd opom	28.08.2024 11:17:52	Bereken Netto bedrag
Bruto openstaande vorderingen (dit jaar)	1.931,70	
Bruto openstaande vorderingen vorig jaar	0,00	
Wijze van vorderen	3 Harde vordering	
Netto vordering naar CD	711,58	
Bruto vordering naar CD	0,00	
Bruto TB uitgezet tot harde vordering	0,00	
Bruto/Netto Vordering uitgezet	0,00	

Participant Participant Role Participant

Participant	Participant Role	Participant
102577138	Policyholder	Milan R.
102577138	Payee	Milan R.
102577138	Payee	Milan R.
102577138	Insured Person	Milan R.

Slika 15. Direktna refundacija

Klikom na dugme *Bereken Netto bedrag* (izračunaj neto iznos) popunjava se polje *Netto vordering naar CD* (neto potraživanje prema CD-u). Čuvanjem promena i odobrenjem ovog iznosa od strane rukovodioca odštetnog zahteva kreira se nova refundacija na ekranu za plaćanja, sa statusom *Requested* (Zahtevano) – Slika 16.

Tabela ZCM_RESERVE se ažurira novim redovima za svaku od ovih izmena. Prilikom promene procenta, došlo je do kreiranja dve refundacije na ekranu za plaćanja sa statusom *Parked* (parkirano). One su u tabeli ZCM_RESERVE objedinjene u jedan red sa razlogom za promenu ZT. Procesiranjem refundacije kreira se novi red sa razlogom za izmenu ZX. Ažurirana tabela se nalazi za Slici 17.

Kao što je pomenuto u poglavlju 5.3 Kreiranje plaćanja u SAP sistemu, postoje različiti tipovi rezervi. U ovoj tabeli vidimo tipove S6 i SA. Tip rezervi S6 šalje se u sistem FICO – *Financial Accounting and Controlling*, dok se tip rezervi SA šalje u sistem IA – *Insurance Analyzer*.

The screenshot shows the SAP interface for 'Change Claim Q500480637 / ZS71 R Petrovic (Open)'. It features a 'Payment Log' section with a table of payments and a 'Payment Details' section below it.

Payment-Reason-Type	Payee-Description	Prd	Amount	Amount-Base-Currency	Posting-Date	Status
Refund	Miljan R Petrovic		0.00	711.58- EUR	28.08.2024	Requested
Refund	Miljan R Petrovic		0.00	1.274.10- EUR	28.08.2024	Parked
Refund	Miljan R Petrovic		0.00	657.60- EUR	28.08.2024	Parked
Disbursement	Miljan R Petrovic		1.274.10	0.00 EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic		1.233.00	0.00 EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic		657.60	0.00 EUR	27.08.2024	Execute Payment

The 'Payment Details' section shows:

- Payment Number: 6
- Created On: 28.08.2024 14:08:10
- Created By: AA626495
- Changed On: 00:00:00
- Changed By: AA626495
- Transfer Date: 28.08.2024 14:08:10
- Doc. Ref.: 100000045613
- Service Start:
- Service End:
- Net Due Date: 18.09.2024
- Posting Date: 28.08.2024

Slika 16. Direktna refundacija na ekranu za plaćanja

Table: ZCM_RESERVE
Fixed Columns: List Width: 6250

	SUCL	RETYPE	CURR	CHANGNUM	CHANGTIME	CHANGREASON	DELETED	CREATETIME	GROSSRES	CHANGEREASON	RESERVELOT	INDRES	DOCUMENTREF	PAYMDOJUSTANT	RESADJAMT	REMSERANT
001	S6	EUR	000001	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164,70	00	0000000000113	000043	2600000043		0,00	3.164,70	3.164,70
001	S6	EUR	000002	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164,70	03	0000000000113	000021	2600000043		3.164,70-	3.164,70-	0,00
001	S6	EUR	000003	20.240.828.091.752	AA626495	0	20.240.828.091.752	1.931,70	ZT		000000			1.931,70	1.931,70	1.931,70
001	SA	EUR	000004	20.240.828.120.810	AA626495	0	20.240.828.120.810	3.164,70	ZX		000000			0,00	711,58	1.931,70
001	SA	EUR	000001	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164,70	00	ADVSA8	000000	ADVSA8		0,00	3.164,70	3.164,70
001	SA	EUR	000002	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164,70	03	ADVSA8	000000	ADVSA8		3.164,70-	3.164,70-	0,00
001	SA	EUR	000003	20.240.828.091.752	AA626495	0	20.240.828.091.752	1.931,70	ZT		000000			1.931,70	1.931,70	1.931,70
001	SA	EUR	000004	20.240.828.120.810	AA626495	0	20.240.828.120.810	3.164,70	ZX		000000			0,00	711,58	1.931,70

Slika 17. ZCM_RESERVE tabela nakon refundacije

Redovi u tabeli sa razlogom za promenu 00 i 03 su obrađeni od strane sistema za upravljanje ljudskim kapitalom (HCM) i poslati u sistem za isplate (CD), kao i u sistem za finansijsko računovodstvo i kontrolu (FICO). Za ta dva reda se mogu i videti vrednosti polja *RESERVELOT* i *DOCUMENTREF*. Za nove redove koji su kreirani u procesu refundacije, slanje se obavlja manuлно.

2. Slanje refundacije u FICO

SAP FICO (Finansijsko računovodstvo i kontrola) je integralni modul unutar SAP ERP paketa koji omogućava organizacijama da efikasno upravljaju svojim finansijama i donose informisane odluke. SAP FICO igra ključnu ulogu u pomaganju preduzećima da racionalizuju svoje finansijske procese, steknu uvide i osiguraju usklađenost. Sastoji od dva osnovna modula – Finansijsko računovodstvo (FI) i Kontrola (CO). SAP FI se fokusira na računovodstvo i finansijsko izveštavanje, dok se SAP CO modul fokusira na praćenje troškova.

a) Finansijsko računovodstvo (SAP FI)

SAP finansijski modul je posvećen generisanju i upravljanju finansijskim izveštajima i izveštajima. SAP FI modul ima nekoliko pod-modula:

- *General Ledger* - Glavna knjiga: Modul glavne knjige deluje kao centralna komponenta za finansijsko izveštavanje. Integriše različite računovodstvene transakcije koje se evidentiraju u pod-modulima i pruža sveobuhvatan pregled finansijskog stanja organizacije u okviru kontnog plana³¹.

Transformacija glavne knjige u velikim kompanijama fokusira se na standardizaciju upotrebe kodnih blokova u ERP FI – GL modulu koji koriste. Ova transformacija omogućava korišćenje većine dostupnih kodnih blokova u ERP modulu, što rezultira proizvodnjom finansijskih izveštaja prema različitim kriterijumima, kao što su profitni centri, proizvodi ili računi³².

- *Accounts Payable* - Obaveze prema dobavljačima: Modul obaveza prema dobavljačima se bavi upravljanjem fakturama, plaćanjima, automatskim programom plaćanja, izveštajima i drugim transakcijama sa dobavljačima.
- *Accounts Receivable* - Potraživanja: SAP FICO upravlja celokupnim procesom potraživanja, od kreiranja faktura do prijema plaćanja. Modul potraživanja upravlja računima i transakcijama sa kupcima, uključujući fakture, kreditne memorandume, izveštaje o kupcima i slično.
- *Asset Accounting* - Računovodstvo imovine: SAP modul za računovodstvo imovine omogućava organizacijama da upravljaju svojim osnovnim sredstvima, uključujući zemljište, opremu i nekretnine. Ovaj modul sadrži transakcije vezane za penzionisanje, amortizaciju, revalorizaciju i slično.
- *Bank Ledger* - Bankovna knjiga: Modul bankovne knjige obuhvata transakcije povezane sa podacima o bankovnim računima kompanije. Ovaj

³¹ <https://webtel.in/Blog/SAP-FICO-Module-and-Sub-Modules/1343>, pristupljeno: 3. 9. 2024.

³² Bhuvnesh Kumar, "Impact and Need for Financial Transformation in the Insurance Industry Using ERP", *Journal of Enterprise Resource Planning Studies*, 2018/2018, 2.

modul usklađuje transakcije iz bankovnih izveštaja sa transakcijama u pod-modulima SAP-a.

b) Finansijska kontrola (SAP CO)

SAP modul za kontrolu fokusira se na praćenje i izveštavanje o troškovima poslovnih operacija. SAP-CO modul ima nekoliko pod-modula koji su opisani u nastavku:

- Računovodstvo elemenata troškova: prati troškove i prihode povezane sa različitim poslovnim aktivnostima, pružajući detaljan uvid u strukture troškova i omogućavajući kontrolu troškova.
- Računovodstvo centara troškova omogućava organizacijama da alociraju troškove na specifične centre troškova, pomažući u praćenju i optimizaciji troškova odeljenja.
- Računovodstvo profitnih centara: omogućava preduzećima da analiziraju profite i gubitke na nivou pojedinačnih poslovnih jedinica ili profitnih centara, pružajući granularni pregled finansijskog učinka.
- Interni nalozi: olakšava praćenje i upravljanje internim projektima, osiguravajući da su troškovi pod kontrolom i da se resursi efikasno koriste³³.
Plaćanja se iz sistema za upravljanje odštetama šalju u FICO u dva koraka:
1. Kreiranje serije – *lot creation*
2. Slanje serije u FICO – *lot processing*

c) Kreiranje serije

Kreiranje serije za plaćanje (*payment lot*) obavlja se preko transakcije ZFCD_CM_RESERVE. U okviru iste transakcije se nalazi i program za slanje serije u FICO. Na prvom ekranu je kreiranje serije, i sve što je potrebno uneti je broj odštete i izvršiti – Slika 18.

³³ <https://webtel.in/Blog/SAP-FICO-Module-and-Sub-Modules/1343>, pristupljeno: 3. 9. 2024.

✓ [] [] [] [] Cancel

Processing modus

☒ Lot creation
☐ Lot processing

Run option

☐ Simulation

Lot creation **Lot processing**

Filter options

Processing option: 1 Normal processi. ▾

Reserve Type		to		[+]
Internal Claim Type		to		[+]
Claim Number	QS00480637	to		[+]
Changed On		to	01.09.2024	[+]

☐ Do not aggregate items

Output options

Reserve Changes: ☐
Reserve Lot Header: ☐
Reserve Lot Lines: ☐
Log: ☒
Layout: []

Slika 18. Kreiranje serije.

d) Slanje serije u FICO

Slanje serije u FICO se obavlja istom transakcijom kojom se serija i kreira. *Lot processing* ekran se nalazi odmah pored ekrana za kreiranje serije. Podaci koje je potrebno uneti su broj serije i FICO pod-sistem u koji se šalje serija. Na Slici 19 uneseni su broj serije koja je kreirana u prethodnom koraku, i sistem koji je krajnja destinacija: HIACLNT400_TRUSTED.

Kao rezultat ovog procesa dobija se novi dokument i njegov broj u FICO sistemu – Slika 20.

✓

Cancel

Processing modus

☐ Lot creation

☒ Lot processing

Run option

☐ Simulation

Lot creation

Lot processing

Filter options

Reserve Lot

8397

to

Created By

to

Created On

to

Created At

00:00:00

to

00:00:00

Company Code

to

Posting Date

01.09.2024

Document Type

CM

Aansturing voor boeking direct in FICO1 (nieuwe werkwijze juni 2021)

RFC Destination

HIACLNT400_TRUSTED

Output options

Document Header

☐

Document Positions

☐

Document Currency Fields

☐

Extention table

☐

Log

☒

Slika 19. Slanje serije u FICO

Number of Log entries 5

Exception	Claim No.	Subclaim	Res.	Type	Sequens	Description	Paym	Adj	Res	Adj	Receiv	Reserve	Lot	Indep.	Reserve	Reserve
0008	n.a.					Document posted successfully; ICLRS 000000008397 I	0,00	0,00		0,00						0,00
0008	n.a.					Documentnummer: 26000000904	0,00	0,00		0,00						0,00
0008	n.a.					Saving update to reserve lot header (iclindres)	0,00	0,00		0,00						0,00
0008	n.a.					Saving update to reserve changes (zcm_reserve)	0,00	0,00		0,00						0,00
0008	n.a.					FICO document 26000000904 created from Reserve Lot 000000008397	0,00	0,00		0,00						0,00

Slika 20. Kreiranje FICO dokumenta

e) Rezultat transporta u FICO

Tabela ZCM_RESERVE se automatski ažurira ovim procesom: za unose koji se odnose na refundaciju sada postoje vrednosti za RESERVELOT i DOCUMENTREF polja, što je prikazano za Slici 21. Kao što je već rečeno, samo redovi sa tipom rezervi S6 se šalju u FICO.

Table ZCM_RESERVE

Fixed Columns: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Live Width: 255

NR	RESERVE	GRP	CHANGEREAS	CHANGETIME	CHANGEREAS	DELETED	CREATETIME	GROSSRES	CHANGEREAS	RESERVELOT	EXPRES	DOCUMENTREF	PAID/LOST/AMT	RESERVELOT	EXPRES
001	S6	EUR	000001	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	00	000000000013	000001	2600000004	0.00	3.164.70	3.164.70
001	S6	EUR	000002	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	03	000000000013	000001	2600000004	3.164.70	3.164.70	0.00
001	S6	EUR	000003	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	27	000000000013	000001	2600000004	1.931.70	1.931.70	1.931.70
001	S6	EUR	000004	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	28	000000000013	000001	2600000004	0.00	711.58	1.931.70
001	SA	EUR	000001	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	00	ADVASSB	000000	ADVASSB	0.00	3.164.70	3.164.70
001	SA	EUR	000002	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	03	ADVASSB	000000	ADVASSB	3.164.70	3.164.70	0.00
001	SA	EUR	000003	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	27	ADVASSB	000000	ADVASSB	1.931.70	1.931.70	1.931.70
001	SA	EUR	000004	20.240.821.142.436	AA026495	0	20.240.821.142.436	3.164.70	28	ADVASSB	000000	ADVASSB	0.00	711.58	1.931.70

Slika 21. Ažurirana ZCM_RESERVE tabela nakon slanja u FICO.

Kao krajnja destinacija (*RFC destination*) za ovu seriju naveden je sistem: HI-ACLNT400_TRUSTED. Kada se korisnik uloguje na HIA sistem sa klijentom 400, može pristupiti ovom dokumentu. Dokumentima se pristupa putem transakcije FB03, gde je potrebno uneti broj dokumenta, u ovom slučaju: 2600000904. Na Slici 22 nalazi se dokument koji pruža detaljan prikaz o iznosu novčanih sredstava i računima na koje su oni uplaćeni.

Documentoverzicht - weergeven -

Doc.srt.: CH (Claims management) Normal Document
Documentnr.: 2600000904 Bedrijfsnr.: 2070 Boekjaar: 2024
Doc.datum: 28.08.2024 Boekingdatum: 28.08.2024 Periode: 08
Belast. berek.:
Doc.valuta: EUR
Doc.kopstekst: Reserve Lot 000000000397

Pos	Rs	Rekening	Korte tekst rekening	Bedrag	CodeBrons.	Prctr	Toewijzing	Val.	Bus	MSD	EUR	Wers	OKAN	Propositie	Mark	IND/COL	Schadejaar	SA
1	50	7111635	Voorziening schade	1.931.70	490	6150010	56	EUR	190	2070	AVE	05	SEPDAIS0000	PART	IND		2024	NL
2	40	7240050	Nutstte voorziening	1.931.70	490	6150010	56	EUR	2070	AVE	05	SEPDAIS0000	PART	IND			2024	NL
3	50	7211000	Betaalde schade via	1.931.70	490	6150010	56	EUR	2070	AVE	05	SEPDAIS0000	PART	IND			2024	NL
4	40	1010005	Terug te word uitk	1.931.70	490	6150010	56	EUR	2070	AVE	05	SEPDAIS0000	PART	IND				NL
5	50	1010005	Terug te word uitk	711.58	490	6150010	56	EUR	2070	AVE	05	SEPDAIS0000	PART	IND				NL
6	40	1311005	Te te bet uitk FICOG	711.58	490	1100000	56	EUR	2070	AVE	05	SEPDAIS0000	PART	IND				NL

Slika 22. FICO dokument 1.

3. Slanje refundacije u IA

SAP Insurance Analyzer i dodatne komponente SAP FRDP (*Financial Risk and Data Platform*) predstavljaju najnaprednije aplikacije za finansijsko i upravljanje rizicima osiguravajućih kompanija kako bi implementirali relevantne IFRS4/9/17 i Solvency propise. SAP Insurance Analyzer se sastoji od komponenti *Accounting for Insurance Contracts* (Računovodstvo za osiguravajuće ugovore) i *SAP Solvency Management for Insurance* (Upravljanje solventnošću za osiguranje)³⁴.

Transport u IA nije manuelni proces, već se obavlja preko zakazanog *Job-a* u SAP-u. *Job* predstavlja posao koji se u SAP-u obavlja pozadinski, u neko zakazano vreme. Poslovi i koraci posla omogućavaju da se složeni zadaci tretiraju kao jedinice.

³⁴ <http://www.gwantec.de/en/services-sap-en-sap-insurance-analyzer>, pristupljeno: 30. 9. 2024.

Može se zakazati nekoliko programa potrebnih za završetak određenog zadatka, kao korake u okviru jednog posla, sa prednošću da posao bude jedan logički kontejner za sve korake potrebne za završetak zadatka.

Koraci posla rade delimično nezavisno od statusa jedan drugog. To jest, nenormalni prekid jednog koraka posla ne vraća rad prethodno završenog koraka posla unazad ako je taj prethodni korak izvršio *commit*. Ako bilo koji korak posla ne uspe, međutim, onda ceo posao ne uspeva. Nikakvi dalji koraci posla se ne izvršavaju i status posla se menja u *canceled*³⁵.

Na primeru koji posmatramo, *Job* je zakazan da se izvršava svakodnevno u 18 časova. Po završetku, podaci su dostupni u IA za dalju obradu, a u sistemu za upravljanje odštetama može se videti PUBSUB_ID vrednost u ZCM_RESERVE tabeli. Kao što je već navedeno, ako je *reserve type* S6, podaci se šalju u FICO. Tip SA se šalje u *Insurance Analyzer*, i zato na slici 23 PUBSUB_ID ima vrednost 0 za *reserve type* S6, a vrednost 202408311005141 za tip SA.

ZCM_RESERVE																					
Client: 100 A Check Table: Subcl: Restype: Curr: Changenam: Indres: Documentref: Paymajustamt: Resadjustamt: Reinresamt: Totpayamt: Subro_received: Sbradjustamt: Prctr: Xindoverloning: Pubsub_id: Cyear_ldis: Ficot: Alloc_nmb: Exit																					
100	A		Q500480937	001	S6	EUR		000001	000043	2600000843	0,00	3.164,70	3.164,70	0,00	0,00	0,00	0001330010			0000 X	
100	A		Q500480937	001	S6	EUR		000002	000021	2600000843	3.164,70	3.164,70	0,00	3.164,70	0,00	0,00	0001330010	X		0000 X	
100	A		Q500480937	001	S6	EUR		000003	000011	2600000804	1.931,70	1.931,70	1.931,70	1.233,00	0,00	0,00	0001330010	X		0000 X	
100	A		Q500480937	001	S6	EUR		000004	000003	2600000804	0,00	711,58	1.931,70	1.233,00	0,00	0,00	0001330010			0000 X	
100	A		Q500480937	001	SA	EUR		000001	000000	ACHSASB	0,00	3.164,70	3.164,70	0,00	0,00	0,00		202408311005141		0000	
100	A		Q500480937	001	SA	EUR		000002	000000	ACHSASB	3.164,70	3.164,70	0,00	3.164,70	0,00	0,00	X		202408311005141		0000
100	A		Q500480937	001	SA	EUR		000003	000000	ACHSASB	1.931,70	1.931,70	1.931,70	1.233,00	0,00	0,00	X		202408311005141		0000
100	A		Q500480937	001	SA	EUR		000004	000000	ACHSASB	0,00	711,58	1.931,70	1.233,00	0,00	0,00			202408311005141		0000

Slika 23. Ažurirana tabela ZCM_RESERVE nakon transporta u IA.

4. Slanje refundacije u CD

Još jedan sistem koji je deo ovog složenog procesa je CD *Collections and Disbursements*. Nakon što je isplata kreirana na strani sistema za odštetu, dalji obračun neto isplate se odvija u HCM sistemu, koji direktno komunicira sa CD sistemom i šalje mu isplatu na dalju obradu i izvršenje. Kada je u pitanju refundacija, ona se direktno šalje iz sistema za upravljanje odštetama u sistem za isplate (CD).

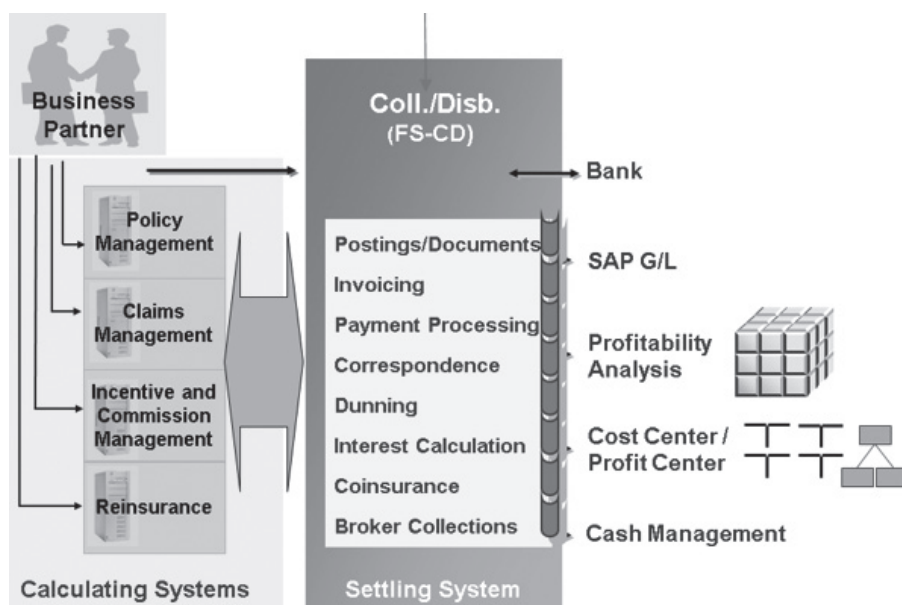
Kolekcije i isplate su u centru operacija, a većina nasleđenih sistema (*Legacy systems*) jednostavno nema funkcionalnost za stvaranje besprekornih interakcija koje današnji kupci zahtevaju. SAP *Collections and Disbursements* (FS-CD) je osnovni operativni deo koji pruža robusnu funkcionalnost za upravljanje naplatom, kolekcijama, upravljanjem plaćanjem i komisijama agenata/brokera³⁶.

Kao sistem za obračunavanje, CD mora biti opremljen neophodnim podacima o obračunu od administrativnih sistema kao što su Upravljanje podsticajima i komisijama (FS-ICM), Upravljanje odštetama (FS-CM), Upravljanje reosiguranjem

³⁵ https://help.sap.com/doc/saphelp_nw73ehp1/7.31.19/en-US/4b/2bc12b4c594ba2e10000000a42189c/content.htm?no_cache=true, pristupljeno: 30. 9. 2024.

³⁶ <https://www.msg-global.com/solutions/sap-fscd-collections-and-disbursements>, pristupljeno: 2. 9. 2024.

(FS-RI) i Upravljanje polisama (FS-PM). Za tu svrhu je dostupan otvoreni interfejs³⁷. Slika 24 pokazuje poziciju CD kao sistema za obračunavanje u mogućem sistemskom okruženju.



Slika 24. Integracija CD-a sa ostalim sistemima³⁸.

Komunikacija između sistema za upravljanje odštetama i CD-a odvija se u dva koraka:

1. Kreiranje plaćanja i slanje u CD – *payment lot*
2. Slanje *info container*-a od CD-a do CM-a.

a) Kreiranje plaćanja i slanje u CD

U sistemu za upravljanje odštetama transakcija FP05 se koristi za kreiranje serije za plaćanje i slanje te serije u sistem za isplate (FS-CD). Ekran za kreiranje nove serije za isplatu je veoma jednostavan, potrebno je samo uneti neki jedinstven ID broj i kliknuti na dugme za kreiranje. Dva važna dugmića su *close* i *post*. U seriji se

³⁷ https://help.sap.com/docs/SAP_ERP/531a600f03624826bdcd98f6f723ef1b/c174cb53f0f67314e-10000000a174cb4.html, pristupljeno: 2. 9. 2024.

³⁸ https://help.sap.com/docs/SAP_ERP/531a600f03624826bdcd98f6f723ef1b/c174cb53f0f67314e-10000000a174cb4.html, pristupljeno: 2. 9. 2024.

može naći više isplata i sve dok je korisnik ne zatvori, moguće je dodati nove. Klikom na dugme *close* serija je zatvorena za nove isplate, a klikom na dugme *post* je poslata u CD.

Pre nego što se zatvori i pošalje, u seriju treba dodati plaćanja. Na Slici 25 nalazi se nova serija za isplate. Neka polja su automatski popunjena na osnovu konfiguracije sistema, a neka mora popuniti korisnik. *Currency*, *Bank clearing account* i *Company code* su polja koja unosi korisnik, a klikom na dugme *New items* prelazi se na ekran za dodavanje isplata.

✓ [dropdown] [icon] New Items Cancel

Control Information

Lot	AB20241607A7	Status	Payments can still be added
Search Term			
Additional info			
Items	0	Items specified	
Debit total	0,00	Debit specified	
Credit total	0,00	Credit specified	

Specifications for posting documents

Document Type	70	Posting Date	01.09.2024	Document Date	01.09.2024
Reconciliation Key	AB20241607A7	Currency	EUR	Exchange rate	

Specifications for posting items on the bank clearing account

Bank clrg acct	13918750	Value date		☐ Line item
Company Code	2070	Business Area		
		Profit Center		

Specifications for selecting and clearing open items

Clearing Reason	01	Selection Cats.	6 3 7
-----------------	----	-----------------	-------

Specifications for Entry

Line Layout	SAP [icon] [icon] Hold
-------------	------------------------

Slika 25. Kreiranje nove serije za isplate za CD.

Za dodavanje isplate potrebno je uneti iznos i broj dokumenta koji je vezan za tu isplatu na ekranu za plaćanja u FS-CM sistemu (Slika 26). Moguće je izvršiti celu isplatu odjednom, a moguće je i podeliti sumu na više delova u okviru jedne serije, ili čak poslati u različitim serijama za isplatu. Nakon zatvaranja serije dugmetom *close*, serija može biti poslata u FS-CD dugmetom *post*.

The screenshot displays the SAP ERP interface for adding a payment to a series. At the top, there are navigation buttons: a checkmark, a dropdown menu, a save icon, a magnifying glass labeled 'Details', a minus sign labeled 'Delete item', and a pencil labeled 'Change item'. Below this is the 'Default values and status' section, which contains a table with the following data:

Lot	AB20241607A7	Debit total	711,58
Bank circg acct	13918750	Credit total	0,00
Company Code	2070	Items	1

Below the 'Default values and status' section is the 'Payments' section, which contains a table with the following data:

S...	Payment amount	1. Selection Value 1	2. Selection Value 2	Bank Num
☐	711,58	1 100000045613	3	
☐		6	3	

Slika 26. Dodavanje plaćanja u seriju.

b) Slanje info container-a od CD-a do CM-a

Sa strane sistema za upravljanje odštetama šalje se zahtev FS-CD sistemu da pošalje takozvani *info container*. Funkcionalnost kontejnera informacija u CD svetu je ključan poslovni proces u SAP osiguranju gde kontejneri informacija čuvaju podatke koje možete poslati spoljnim sistemima u kasnijem trenutku. Ovo je veoma dobra funkcionalnost koju pruža SAP za interakciju sa spoljnim sistemima bez potrebe za puno kodiranja. Aktivnosti koje su deo ovog procesa su:

- Tip informacije (Kategorija)
- Potvrda
- Čuvanje potvrde u kontejner informacija
- Prosleđivanje i čitanje potvrda
- Prikaz kontejnera informacija³⁹

Transakcija za kreiranje kontejnera informacija je FPINFCO1. Potrebno je uneti ID koji čine datum i neki identifikacioni broj od 6 karaktera, kao i *Contract* – broj odštete. Postoje i dodatna tehnička podešavanja na drugom ekranu, kao i ekran za pregled izvršenih programa – *Logs*. Nakon što su uneseni parametri sačuvani, može se kliknuti na dugme *Schedule Program Run* i program se može izvršiti ili odmah, ili zakazati za neko buduće vreme.

³⁹ <https://community.sap.com/t5/sap-for-insurance-blogs/sap-fscd-information-container-functionality/ba-p/13146814>, pristupljeno: 2. 9. 2024.

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Nekoliko stvari se dešava kao rezultat ovog procesa:

1. Refundacija na ekranu za plaćanja menja status iz *Zahtevano (Requested)* u *Primljeno (Received)* (Slika 27),

SAP

Change Claim Q500480637 / ZS71 R Petrovic (Open)

✓ [] ↕ ↶ ↷ ⌂ Notes Cancel

- ✓ Claim Q500480637 Overview
 - Contract Information 300713439
 - ADV voorval
 - PH: Miljan R Petrovic/4907 XE Oostar
 - Instr: Miljan R Petrovic
 - Payments and Reserves
 - Claimoverslijgende notices
 - Hoodlaag (Open)
 - Verzuim vergoeding
 - (# Payments (6))
 - Inzet derden & betalingen (Open)
 - Verzuim overzicht
 - Interventie
 - Interne arbeidsdeskundige
 - Incidentele Opdrachten
 - Betaling declaraties (0)

Payment Log

Payments Overview

Payment Record Type	Payee Description	PkId	Amount	AmtRequested	Currency	Posting Date	Status
Refund	Miljan R Petrovic	☐	711.58	711.58	EUR	28.08.2024	Received
Refund	Miljan R Petrovic	☐	0.00	1,274.10	EUR	28.08.2024	To Be Sent to HCM
Refund	Miljan R Petrovic	☐	0.00	657.60	EUR	28.08.2024	To Be Sent to HCM
Disbursement	Miljan R Petrovic	☐	1,274.10	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic	☐	1,233.00	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic	☐	657.60	0.00	EUR	27.08.2024	Execute Payment

Payment Details

Payment Number 6		Payment Status Received	
Created On	28.06.2024 14:08:10	Created By	AA626495
Changed On	28.06.2024 16:43:16	Changed By	Z_RFC_P1
Transfer Date	28.06.2024 14:08:10	Doc. Ref.	1000000045613
Service Start		Service End	

Participant Participant Role Participants

102577138 Payee Miljan R Py

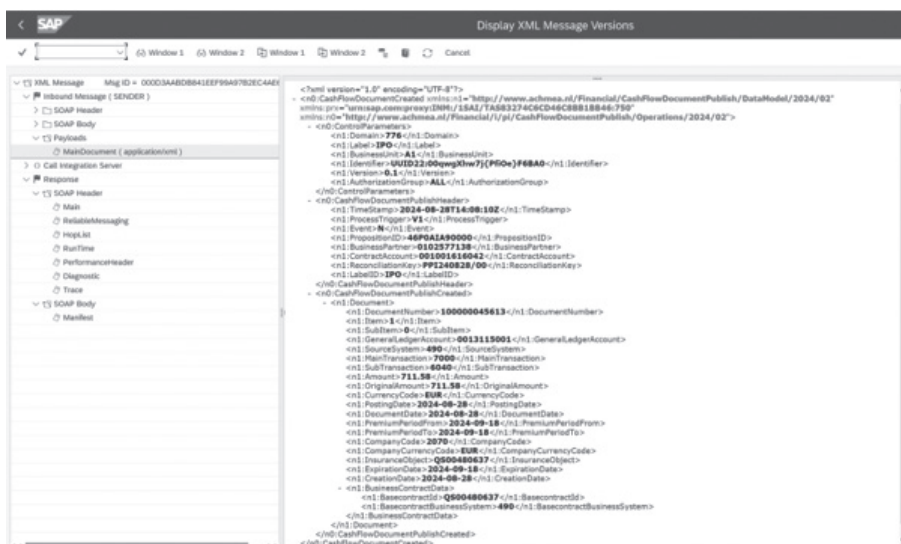
Slika 27. Promena statusa refundacije u Primljeno.

2. Tabela ZCM_RESERVE je ažurirana i dodat je novi red sa razlogom za izmenu ZU (Slika 28),

[illegible]

Slika 28. Ažuriranje tabele ZCM_RESERVE nakon primljene refundacije.

3. Od FS-CD sistema FS-CM sistemu je poslat XML fajl (Slika 29).



Slika 29. XML fajl.

5. Nova obrada refundacije u FICO, IA i HCM

Kako bi se proces priveo kraju, potrebno je poslati i poslednju izmenu u tabeli ZCM_RESERVE u FICO i IA, odnosno poslati red u tabeli sa razlogom za izmenu ZU. Ponovljen je proces kreiranja serije i transport serije u FICO. *Job* koji se automatski završava je obavio transport u IA. Na FICO strani kreiran je novi dokument, prikazan na Slici 30. Poslednja dva reda dokumenta odnose se na refundaciju obrađenu u ovom primeru.

HCM sistem ponovo pokreće okidače za *business partnera*, i ponovo se obračunava neto iznos isplate za tri meseca u kojima postoje plaćanja. Na kraju procesa, HCM šalje pismo sa neto specifikacijom osiguranom licu (Slika 31).

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Documentoverzicht - weergeven -																			
Doc.art.: 08 (Claims management) normaal document																			
Documentnr.: 2600000908 Bedrijfjaar: 2070 Boekjaar: 2024																			
Doc.datum: 29.08.2024 Boekingsdatum: 28.08.2024 Periode: 08																			
Belast.: berek. Boekingsdatum: 28.08.2024 Periode: 08																			
Doc.valuta: EUR																			
Doc.kaptekst: Reserve Lot 000000008399																			
Pos	BS	Rekening	Korte tekst rekening	Bedrag	CodeBronn.	Prctr	Toewijzing	Val.	Bsw	HSD	Schr	Merk	Dcan	Propositie	Rank	Ind/CSL	Schadejaar	BA	
52	50	7131815	voorziening schade	5.273,73	490	61520051	S6	EUR	186	2070	IPD	02		46P01A90000	PART	IND	2024	NL	
53	40	72400500	Nuttatie voorziening	1.273,91	490	61530010	S6	EUR			2070	IPD	02		46P01A90000	PART	IND	2024	NL
54	50	7131815	voorziening schade	6.528,63	490	61530010	S6	EUR	186	2070	IPD	02		46P01A90000	PART	IND	2024	NL	
55	40	72400500	Nuttatie voorziening	750,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
56	50	7131815	voorziening schade	750,00	490	61540010	S6	EUR	186	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
57	40	72400500	Nuttatie voorziening	6.528,63	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
58	50	7131815	voorziening schade	6.528,63	490	61540010	S6	EUR	186	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
59	40	72400500	Nuttatie voorziening	3.894,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
60	50	7131815	voorziening schade	3.894,00	490	61540010	S6	EUR	186	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
61	40	72400500	Nuttatie voorziening	3.794,21	490	61530010	S6	EUR			2070	AVE	05		46P01A90000	PART	IND	2024	NL
62	50	7131815	voorziening schade	3.794,21	490	61530010	S6	EUR	186	2070	AVE	05		46P01A90000	PART	IND	2024	NL	
195	40	7131815	voorziening schade	5.273,73	490	61520051	S6	EUR	190	2070	IPD	02		46P01A90000	PART	IND	2024	NL	
196	50	72400500	Nuttatie voorziening	5.273,73	490	61520051	S6	EUR			2070	IPD	02		46P01A90000	PART	IND	2024	NL
197	40	72011000	Betalde schade via	5.273,73	490	61520051	S6	EUR			2070	IPD	02		46P01A90000	PART	IND	2024	NL
198	50	21100044	Tr. Inlezen items HCN	5.273,73	490	54009000	S6	EUR			2070							NL	
199	40	7131815	voorziening schade	1.273,91	490	61530010	S6	EUR	190	2070	IPD	02		46P01A90000	PART	IND	2024	NL	
200	50	72400500	Nuttatie voorziening	1.273,91	490	61530010	S6	EUR			2070	IPD	02		46P01A90000	PART	IND	2024	NL
201	40	72011000	Betalde schade via	1.273,91	490	61530010	S6	EUR			2070	IPD	02		46P01A90000	PART	IND	2024	NL
202	50	21100044	Tr. Inlezen items HCN	1.273,91	490	54009000	S6	EUR			2070							NL	
203	40	7131815	voorziening schade	750,00	490	61540010	S6	EUR	190	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
204	50	72400500	Nuttatie voorziening	750,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
205	40	72011000	Betalde schade via	750,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
206	50	13115005	TB Te bet. uitk. FICOG	750,00	490	21000000	S6	EUR			2070							NL	
207	40	7131815	voorziening schade	6.528,63	490	61540010	S6	EUR	190	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
208	50	72400500	Nuttatie voorziening	6.528,63	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
209	40	72011000	Betalde schade via	6.528,63	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
210	50	21100044	Tr. Inlezen items HCN	6.528,63	490	54009000	S6	EUR			2070							NL	
211	40	7131815	voorziening schade	3.894,00	490	61540010	S6	EUR	190	2070	CBA	01		46P01A90000	PART	IND	2024	NL	
212	50	72400500	Nuttatie voorziening	3.894,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
213	40	72011000	Betalde schade via	3.894,00	490	61540010	S6	EUR			2070	CBA	01		46P01A90000	PART	IND	2024	NL
214	50	13115005	TB Te bet. uitk. FICOG	3.894,00	490	54009000	S6	EUR			2070							NL	
215	40	7131815	voorziening schade	3.794,21	490	61530010	S6	EUR	190	2070	AVE	05		46P01A90000	PART	IND	2024	NL	
216	50	72400500	Nuttatie voorziening	3.794,21	490	61530010	S6	EUR			2070	AVE	05		46P01A90000	PART	IND	2024	NL
217	40	72011000	Betalde schade via	3.794,21	490	61530010	S6	EUR			2070	AVE	05		46P01A90000	PART	IND	2024	NL
218	50	13115005	TB Te bet. uitk. FICOG	3.794,21	490	54009000	S6	EUR			2070							NL	
305	50	10100001	Terug te vold. uitk.	1.931,80	490	61530010	S6	EUR			2070							NL	
306	40	21100044	Tr. Inlezen items HCN	1.931,70	490	54009000	S6	EUR			2070							NL	

Slika 30. FICO document 2.

VERTROUWELIJK

R. Petrovic
Ljndonk 31
4907 XE Oosterhout

Datum: 30 augustus 2024 Oms. Aankomst: 0102577138

Onderwerp: Uw arbeidsongeschiktheidsuitkering

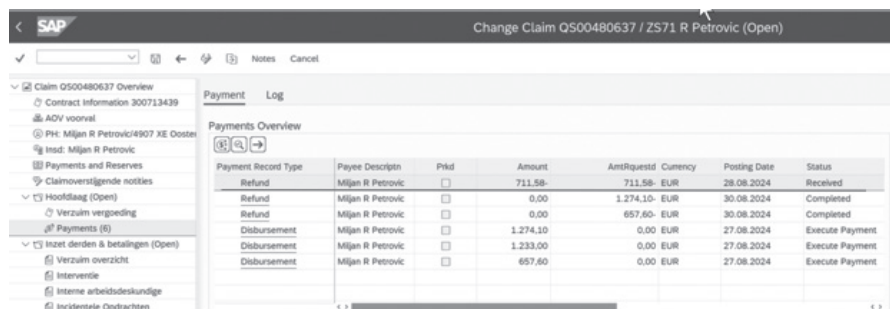
Uitkeringsspecificatie augustus 2024

Loonheffingskorting : Nee
Tabelkleur : Groen

Omschrijving	Periode	Inhouding	Bedrag
AOV Uitkering Q500480637	01-06-2024 t/m 31-07-2024		€ -1.931,70
INHOUDINGEN			
Bijdrage ZVW		€	-102,76
Loonheffing		€	-713,88
Loonheffingen			
		€	-816,64
Totaal inhoudingen		€	816,64
Netto uitkering		€	-1.115,06
Vordering: bedrag voldaan		€	711,58
Vordering: door ons betaald		€	403,48
Saldo		€	0,00

Slika 31. Pismo neto specifikacije za osiguranika.

Na sistemu za odštetu takođe se vidi da je proces u potpunosti završen (Slika 32). Refundacija na ekranu za plaćanja menja status u Izvršeno (*Completed*).



Payment Record Type	Payee Description	Prid	Amount	AmtRequestd	Currency	Posting Date	Status
Refund	Milan R Petrovic		711.58	711.58	EUR	28.08.2024	Received
Refund	Milan R Petrovic		0.00	1.274.10	EUR	30.08.2024	Completed
Refund	Milan R Petrovic		0.00	657.60	EUR	30.08.2024	Completed
Disbursement	Milan R Petrovic		1.274.10	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Milan R Petrovic		1.233.00	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Milan R Petrovic		657.60	0.00	EUR	27.08.2024	Execute Payment

Slika 32. Promena statusa refundacije u Izvršeno.

VIII Zaključak

Analiza procesa isplata u SAP ERP sistemu jasno pokazuje značaj ERP sistema u modernim poslovnim okruženjima. SAP ERP sistem je u mogućnosti da pruži organizacijama potpunu integraciju svih sistema neophodnih da se izvrše kompleksni procesi. U ovom radu je prikazan samo jedan primer takvog procesa, u koji je uključeno pet sistema. Proces je podržan u celini sa visokim stepenom automatizacije i prikazano rešenje olakšava zaposlenima izvršavanje svakodnevnih operacija.

Na ovom primeru prikazana je efikasnost SAP-a kao ERP sistema i kao rešenja za kompanije koje traže način da poboljšaju svoju poziciju na tržištu. Za kompanije je vrlo značajno da proces isplata bude centralizovan proces, kako bi se obezbedila bolja kontrola i praćenje troškova.

U budućnosti, dalji razvoj SAP sistema prati napredne tehnologije kao što su veštačka inteligencija i mašinsko učenje, što može unaprediti brojne procese, i daje prostor SAP-u da kontinuirano pruža organizacijama kvalitetno rešenje za upravljanje organizacijom.

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IMPLEMENTATION OF RESERVE AND PAYMENT CALCULATION SYSTEM IN CLAIMS MANAGEMENT WITHIN THE SAP ERP SYSTEM

ORIGINAL SCIENTIFIC PAPER

Summary

This paper presents the implementation of an SAP solution in the insurance sector. It begins with an overview of ERP systems and SAP, with a focus on the FS-CM Claims Management module. The aim of the paper is to introduce an information system for the complex process of claims payments, which is one of the key processes in an insurance company. The implementation encounters numerous challenges: how to automate the entire process and how to integrate all the systems involved. It is necessary to follow the process from the creation of a claim request, through payment calculation and claim processing, to the final payment to the policyholder. The presented solution involves the integration of multiple SAP modules and systems to enable the process, as well as the use of some SAP modules in a different way than their standard application. As an ERP system, SAP has the capability to provide such integration of the entire process from start to finish.

Keywords: *SAP, ERP systems, FS-CM Claims Management, claims management*

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I. Introduction

Every business system can be described through a specific structure and a set of business processes executed within that structure. If these processes are to be automated, it is necessary to develop appropriate information systems that ensure each business process, or its individual activities, is automated to the greatest possible extent.⁴ Although information systems create many exciting opportunities for enterprises, they also represent a source of new problems, questions, and challenges for managers. Large software and hardware systems still fail despite rapid advances in information technology.⁵

Increasing efficiency, optimizing costs, and managing resources represent the primary tasks of management. Only those business systems that have ensured a meaningful flow of information and goods within the supply chain, achieved excellent customer relationship management, and implemented e-business can gain a strategic advantage.⁶ Integrated software solutions, among which ERP systems stand out, contribute to transforming the industrial landscape.⁷ An ERP system encompasses modules for all key areas of business, such as procurement, production, materials management, sales, marketing, finance, and human resources.

SAP was one of the first companies to develop standard software for business solutions and continues to offer leading ERP solutions in the industry.⁸ Among the numerous companies that have implemented SAP software solutions, many are insurance companies. The insurance sector requires the management of complex and diverse processes, including policy administration, premium calculation, claims processing, actuarial activities, and risk management. It is necessary to track and record vast amounts of data on clients, contracts, and regulatory reports. Integration with external systems and databases is often required. This is why there is no single ready-made business solution that can meet all the requirements of insurance companies. Instead, it is necessary to integrate multiple SAP modules and solutions and tailor them to the specific needs of each client. This, in turn, represents the greatest challenge in implementing SAP solutions in the insurance sector.

This paper addresses one of the most important processes in claims management – the reserve and payment calculation system. The goal is to support the process entirely, with a high level of automation, to ensure that employees can use

⁴ Bojan Jovičić, Siniša Vlajić, „Evolucija ERP sistema“, *ИНФОРМ*, 22/2007, 18–22.

⁵ Chetan S. Sankar, Karl-Heinz Rau, *Implementation Strategies for SAP R/3 in a Multinational Organization: Lessons from a Real-World Case Study*, IGI Global, 2006, 2.

⁶ Dragana Rejman Petrović, „ERP sistemi u funkciji unapređenja kvaliteta poslovanja“, *Nacionalna konferencija o kvalitetu*, Faculty of Mechanical Engineering, University of Kragujevac, Kragujevac, 2009, A15–A22.

⁷ Thomas F. Wallace, Michael H. Krezmar, *ERP: making it happen: the implementers' guide to success with enterprise resource planning*, Hoboken, NJ, USA 2001, 4.

⁸ <https://www.sap.com/westbalkans/about/what-is-sap.html>, accessed on August 21, 2024.

the solutions as easily as possible, thereby simplifying their daily operations and increasing overall business efficiency. This paper provides a detailed presentation of the solution implemented in the project. All system screenshots are original from the project and are therefore shown in Dutch or English.

II. ERP Systems

Enterprise resource planning (ERP) systems have had a profound impact on enterprises and organizations worldwide.⁹ In most cases, ERP systems are implemented with the objective of improving a particular aspect of an organization, such as strategic, organizational, operational, managerial, or IT infrastructure capabilities.¹⁰ An ERP system (*Enterprise Resource Planning*) represents a software solution designed to manage all of an enterprise's business functions. It is an integrated system that connects all parts of the organization, enabling their mutual coordination and the flow of information between them. By using an ERP system, an organization manages its entire business through a single software platform and stores all critical information in one centralized location.¹¹

In addition to leading proprietary ERP systems such as SAP and *Microsoft Dynamics*, the market has also seen a significant presence of open-source ERP systems. Small and medium-sized enterprises often opt for open-source ERP solutions, primarily due to their lower implementation and maintenance costs.¹²

The structure of an ERP system typically consists of a collection of applications. These are organized into functional areas referred to as modules. Naturally, there are differences among individual ERP systems in terms of module composition, which means that not all ERP systems encompass the same functional areas, nor do they always include identical modules.¹³

1. Advantages of ERP Systems

In her book on modern ERP systems, Bradford discussed the advantages and disadvantages of ERP implementation within an enterprise. Among the primary

⁹ Debra Howcroft, Duane Truex, „A critical analysis of ERP systems: the macro-level“, *The Database for Advances in Information Systems*, 4/2001, 13–18.

¹⁰ Jonas Hedman, Andreas Borell, The Impact of Enterprise Resource Planning Systems on Organizational Effectiveness: An Artifact Evaluation. In *Enterprise Resource Planning: Global Opportunities*, Hershey, PA: Idea Group Publishing, 2002, 78–96.

¹¹ Milena Ristić, „Šta je ERP – Značaj ERP rešenja u poslovanju preduzeća“, 2017, <https://beleske.com/sta-je-erp-znacaj-erp-resenja-u-poslovanju-preduzeca/>, accessed on August 10, 2024.

¹² Dragana Maljković, Ognjen Pantelić, „Komparativna analiza ERP sistema otvorenog tipa“, *STED Journal*, 5/2019, 9–18.

¹³ D. Rejman Petrović, A16-A17.

advantages is data integration. In ERP systems, data is collected once and shared throughout the enterprise, thereby reducing the risk of inaccuracies and redundancies in the data and eliminating time lost on verification, re-verification, and data reconciliation.¹⁴ One of the outcomes of ERP introduction in the context of integration is centralization. By implementing such a system, an enterprise can replace two or more independent applications and eliminate the need for external interfaces that were previously required to link these systems.¹⁵ For organizations that process large volumes of data, data quality is the foundation of organizational success.^{16 17} Poor data quality can cost a company as much as 10% to 20% of its total revenue.¹⁸ Another advantage of ERP systems is real-time access to information, which improves collaboration and communication across the enterprise.

An ERP system also requires the company to share a common process and data model that encompasses complex operational processes from start to finish, such as those found in manufacturing and supply chain management. This standardization improves coordination within the organization and across the organizational network, facilitating interaction with both internal and external stakeholders. ERP vendors design their solutions around processes based on industry best practices.

Finally, ERP systems can reduce operational costs and increase revenue. Companies that implement ERP do so in order to achieve efficiencies such as lower inventory costs, reduced manufacturing expenses, or decreased procurement costs.

2. Disadvantages of ERP Systems

Implementing an ERP system involves far more than simply installing off-the-shelf software. It is a complex, time-consuming undertaking that can involve numerous issues. Many of the issues encountered during implementation relate to the so-called *soft stuff* (human factors) as opposed to *technical stuff* (software/hardware issues). A lack of employee involvement can present a significant obstacle if staff members are not informed about the organization's motivation for investing in an ERP system, or if their opinions and feedback are not taken into account during the implementation process. In some cases, ERP systems face resistance because employees may be quite content with legacy systems they have used for decades.

¹⁴ Marianne Bradford, *Modern ERP: Select, implement and use today's advanced business systems*, third edition, Morrisville, NC, USA 2015, 6-9.

¹⁵ B. Jovičić, S. Vlajić, 18–20.

¹⁶ Stuart Madnik et al., „Overview and Framework for Data and Information Quality Research“, *Journal of Data and Information Quality*, 1/2009, 1–22.

¹⁷ Heinrich Bernd, Marcus Kaiser, Klier Mathias, „Does the EU insurance mediation directive help to improve data quality? A metric-based analysis“, *ESCIS Proceedings*, 195/2008, 1871–1882.

¹⁸ Thomas Redman, „Data: An unfolding quality disaster“, *Dm Review*, 14/2004, 21–23.

Another disadvantage of ERP systems is their high cost, particularly for software from well-known, larger ERP vendors such as SAP and Oracle. An ERP system and its implementation process can be the most expensive investment a company will make. Smaller companies generally incur lower implementation costs, but they can experience the same types of implementation issues. An ERP system also requires ongoing maintenance to preserve its stability and compatibility with a broad range of constantly evolving software applications. Furthermore, the standardization of business processes, considered an advantage, can also be a disadvantage if this structure deviates from, or conflicts with, the company's culture or expectations.

For these and many other reasons, companies should not make the decision to implement an ERP system lightly. Successful implementation requires that all employees - from functional users and IT staff to top management - be motivated to work closely together to advance the organization's mission.¹⁹

3. The Future of ERP Systems

The future of ERP systems lies in delivering efficiency, scalability, and speed to business operations. Conventional ERP systems must evolve by integrating technologies such as sensors and artificial intelligence (AI). Next-generation ERP systems will need to be both adaptable and scalable, leveraging analytics and machine learning. Furthermore, conventional ERP systems were originally designed as *on-premise* solutions, and therefore must transition to *cloud-based* systems. *Cloud* technology enables users to access these resources via the internet, offering numerous advantages, including scalability, accessibility, cost savings, ease of maintenance and updates, and enhanced security. Transition to the *cloud* allows ERP systems to become more agile, more efficient, and better prepared for future challenges.²⁰ One of the main advantages of *cloud-based* ERP systems is their ability to provide real-time data access and analytics. In a supply chain risk management case study, it was found that real-time monitoring using *cloud-based* ERP systems significantly improves the ability to proactively manage risks.²¹

Supply chain resilience has become increasingly important for manufacturers. The emphasis is on the ability of the supply chain not only to withstand adverse events, but also to adapt to and recover from them, ensuring sustained performance and competitive advantage.²² In the year when COVID-19 emerged, manufacturers

¹⁹ M. Bradford, 6–9.

²⁰ Zahoor Syed *et al.*, (2024) „Enhancing supply chain resilience with cloud-based ERP systems“, IRE Journals, 8(2), 106–128.

²¹ Wennan Zhang *et al.*, „Digital-Twin Enabled Construction System For Supply Chain Risk Management“, 2023 IEEE 19th International Conference on Automation Science and Engineering (CASE), Auckland, New Zealand, 2023, 1–6.

²² Timothy J. Pettit, Keely L. Croxton, Joseph Fiksel, „The Evolution of Resilience in Supply Chain Management: A Retrospective on Ensuring Supply Chain Resilience“, *Journal of Business Logistics*, br.40/2019, 56–65.

faced significant disruptions in supply chains and were compelled to develop rapid production responses. This crisis highlighted the need to enhance supply chain resilience so that industrial organizations can effectively adapt to potential disruptions, mitigating risks associated with supply chain failures. This includes, for example, collecting and analyzing data on various factors that can affect supply, such as natural disasters, geopolitical events, transport delays, and supplier risks. For this purpose, ERP systems can collect real-time data from multiple sources, including sensors, IoT (*Internet of Things*) devices, and external data providers. Analysis of such data can provide early warning signals and enable proactive decision-making.²³

III. SAP ERP SYSTEM

SAP was founded nearly 40 years ago in Mannheim, Germany, by a group of former IBM engineers. The idea was to assist companies in replacing 10 to 15 different business applications, such as financial systems (managing accounts payable and accounts receivable), warehouse applications, production planning solutions, plant maintenance systems, and others, with a single integrated system. This vision became a reality when *Systems, Applications, and Products in Data Processing* (SAP) opened its doors in 1972. Today, SAP is utilized by more than one million business users working for over 100,000 clients across more than 120 countries.

It is important to understand the distinctions between SAP components, modules, and transactions. SAP uses the term *component* interchangeably with *business application*, the latter often abbreviated simply as *application*. In contrast, SAP modules provide specific functionality within a component. Examples such as the Financial module, Production Planning module, and Materials Management module are easily explained. These individual SAP modules combine to form an SAP ERP component. Within a given module, the company's business processes are configured and assembled. Business processes are also referred to as business scenarios. A business process may require transactions to be executed across several different modules, possibly even from multiple components,²⁴ as illustrated in Figure 1.

²³ <https://www.itexchangeweb.com/blog/the-future-of-erp-systems/>, accessed on August 13, 2024.

²⁴ George Anderson, *Sams teach yourself SAP in 24 hours*, fourth edition, Carmel, IN, USA 2011, 8–10.

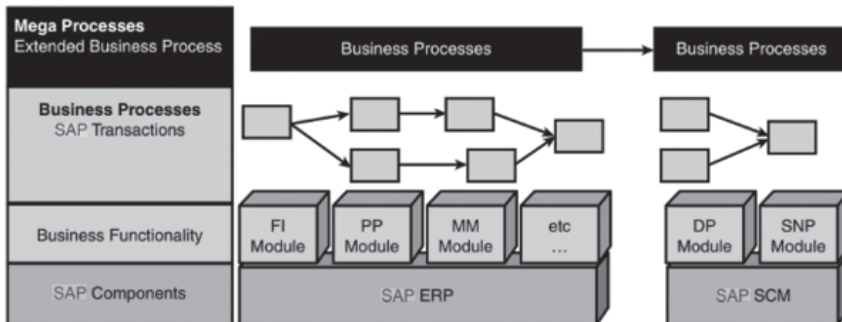


Figure 1. SAP Components, Modules, and Transactions.²⁵

IV. SAP For Insurance

SAP for Insurance is a comprehensive package covering the functionalities required to support insurance-specific processes. This package can be integrated with both SAP and non-SAP *front-office* and *back-office* solutions and consists of various modules:

- FS-PRO *Product Lifecycle Management for Insurance* module is responsible for modeling product structures and maintaining all actuarial calculations, rating rules, and formulas to be applied.
- FS-QUO *SAP Quotation and Underwriting for Insurance* is used for creating insurance quotations. FS-PQM refers to the combination of FS-PRO and FS-QUO.
- FS-PM *Policy Management* component is used for the administration of insurance policies from inception throughout the entire policy lifecycle. It is the central SAP component for insurance.
- FS-CM *Claims Management* is responsible for managing claims from registration to settlement. It is directly integrated with payment systems to enable claims processing through to client disbursement.
- FS-CD *Collections & Disbursements* module handles all incoming and outgoing payments of the insurance company. Premiums or claim payments are automatically tracked, and the module is fully integrated with banking interfaces for payment reconciliation.
- FS-ICM *Incentive and Commission Management* manages all data related to intermediaries and agents and calculates the corresponding commissions earned by intermediaries.

²⁵ G. Anderson, 8–10.

- FS-RI *Reinsurance Management* manages all reinsurance processes and is fully integrated with the aforementioned insurance modules.

Each module can be purchased and used individually, although best practice is to use them together as a fully integrated SAP insurance solution,²⁶ as illustrated in Figure 2.

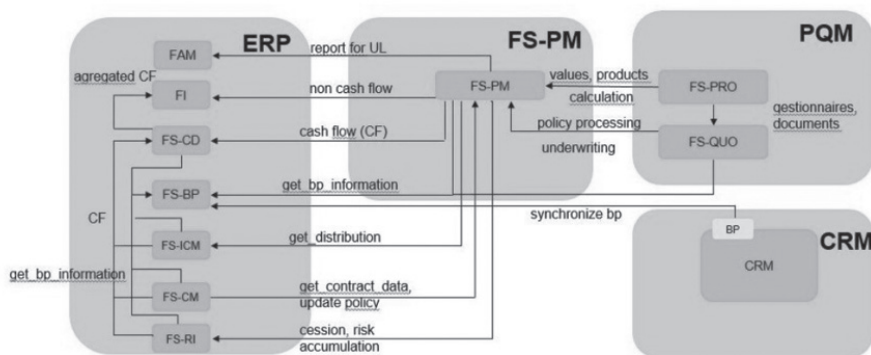


Figure 2. Integration of modules.²⁷

V. Claims Management Module

FS-CM *Claims Management* is used for managing claims from the moment of notification through to claim settlement. The primary processes within claims management are:

- *Claim Notification*
- *Claim Handling*
- *Claim Fulfillment*
- *Claim Recovery.*

The Policy Management module (FS-PM) aggregates data relevant for commissions and sends it to the Incentive and Commission Management module (FS-ICM). FS-ICM then triggers the Collections & Disbursements module (FS-CD) to generate a commission payment. The same principle applies to the interface between FS-PM and FS-CD, where FS-PM creates all cash flows and transmits them to FS-CD. In the event of a claim, the Claims Management module (FS-CM) will call FS-PM to request policy data, known as the policy *snapshot*. In this case, FS-CM invokes the built-in

²⁶ <https://s4ic.com/sap-for-insurance/>, accessed on August 25, 2024.

²⁷ S4IC, SAP for Insurance: how do the modules work together?, 2022, <https://www.linkedin.com/pulse/sap-insurance-how-do-modules-work-together-s4ic/>, accessed on August 25, 2024.

functionality within FS-PM to collect the relevant insurance policy data necessary for claim creation and processing. Upon claim settlement, FS-CM will call FS-CD to generate an outgoing payment to reimburse the insured party for the incurred loss.²⁸

VI. Reserve Calculation Process and Payment Execution

The payment process implemented in SAP for an insurance company involves the following modules:

- FS-CM *Claims Management* – claims management system
- HCM *Human Capital Management* – human capital management system
- CD *Collections & Disbursements* – financial services collections and disbursements management
- FICO *Financial Accounting and Controlling* – financial data management system for generating and analyzing financial reports
- IA *Insurance Analyzer* – financial risk management system

1. Creation of a Claim in the SAP System

The process begins with the creation of a *claim* in the SAP system. The transaction ICLCDC01 is the standard SAP transaction used for creating insurance claims. In addition to this standard transaction, custom transactions can also be created. The transaction ZICL_SZ_CDC01 is used for claim creation in the project under consideration, specifically for claims related to the inability to perform work. Figure 3 shows the claim creation screen. The user is required to enter the policy system as well as the insurance policy number. Mandatory fields also include the date the claim request is submitted and the date from which the claim period begins.

For each claim a timeline is maintained, i.e. chronologically recording when the insured party (SAP *business partner*) submitted previous claims for the same cause. It is necessary to enter a percentage value representing the degree to which the insured party is unable to perform work, along with a code indicating the medical reason for this inability. Compensation is calculated based on this percentage. Figure 4 displays the screen showing the timeline and the required fields for claim creation.

Once the claim is saved, the timeline must be approved by the claims request supervisor.

²⁸ S4IC, SAP for Insurance: how do the modules work together?, 2022.

Claim Edit Goto Utilities System Help

< SAP

Create Claim : Initial Screen SZ

✓ [] [] [] [] Cancel

Insured Person

PSN [] of Insured Person []

Policy Search

Polysystem [Z1_PMPRT FSPM ADV] Policy [300713439]

Claim Information

Date of Loss [15042024] ☒ Date Estimated

Meldingsgegevens

Datum Melding [15042024]

Verlengde Regie

☐ 42e weekmelding VR

Preventie

☐ AOV Preventie claim

Figure 3. Claim Request Creation.

Claim Edit Goto Utilities System Help

Create Claim : AOV voorval

Claim Overview

- Contract Information 300713439
- AOV voorval
- PH: Miljan R Petrovic/4907 XE Oosten
- Insd: Miljan R Petrovic
- Payments and Reserves
- Claimoverstijgende notices
- Hoofdlag (Open)
- Inzet derden & betalingen (Open)
 - Verzuim overzicht
 - Interventie
 - Interne arbeidsdeskundige
 - Incidentele Opdrachten
 - Betaling declaraties (0)

AOV voorval Strategie Melding details - overzicht Aanvraag zwangerschapssuik. Protest Beperkingenpatroon Bijzonder verlov

AOV tijdstip

Valid From	Valid-To Date	Stat.	Oo.	Red.	Overlijden	CAS-code	CAS-code	Description	Coulan.	Tijd	Pol.Stat.
15.04.2024	31.12.9999	Draft	1C	15		A					

AOV kopgegevens

Geldig van Mutatiesoort 15.04.2024 HM Handm. Geldig tot en met Status 31.12.9999 Draft

AOV gegevens

Participant	Participant Role	Participants
102677138	Policyholder	Miljan R Pr
102677138	Insured Person	Miljan R Pr

AO percentage - gemeld	AO percentage - geaccepteerd	Datum gemeld	Oorzaak	Acc. reden	Uitkering
		15.04.2024		15 vaststelling	

Datum overlijden

CAS-code 1 A

CAS-code 2

Description

Figure 4. Timeline Creation.

2. Reserve Calculation for Claims

The creation of reserves within an insurance company is a key risk management practice, ensuring that the company holds sufficient funds to meet future obligations to policyholders. It is necessary to calculate reserves for incurred but not yet paid claims, as well as for future claims. This process relies on complex mathematical and statistical models.

The actuarial reserve consists of the following components:

- reserve for claim liabilities, also known as the reserve for losses or incurred but not reported (IBNR) reserve
- reserve for premium liabilities
- reserve for other liabilities.²⁹

In our example, reserve calculation is carried out using a program implemented specifically for the specific project requirements, rather than a predefined SAP package program. SAP programs are accessed via transaction SE38. The desired program is executed after entering the relevant parameters, such as the claim number.

The output of the reserve calculation program is the reserves saved in the user table ZICLD_SZ_KASSTRO, the structure of which is shown in Figure 5. All necessary information is recorded: claim number, calculation *timestamp*, with the fields RES_G_CLAIM and RES_G_EXPERTISE representing the reserve amounts.

For the claim numbered QS00624006, Figure 6 displays a monthly breakdown of monetary reserves for all years during which the insured had coverage.

In the example under consideration, reserve calculation has not yet been performed, so the process will start with a reserve amount of 0 EUR.

²⁹ <https://www.axxima.ca/blog/actuaries-and-annual-reserving-work-what-you-need-to-know/>, accessed on August 30, 2024.

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Transparent Table	ZICLD_SZ_KASSTRO	Active
Short Description	Cash Flow	
Attributes	Delivery and Maintenance	Fields
Input Help/Check	Currency/Quantity Fields	
Field	Key	Initi...
CLIENT	☒	☒ MANDT
CLAIM	☒	☒ ICL_CLAIM
LOB_NAME	☒	☒ Z_SZ_CF_LOBNM
INJURY_YR	☒	☒ Z_SZ_DTE_INJURY
CASH_FLOW_DT	☒	☒ Z_SZ_CF_DATE
INCLUDE	☐	☐ ICL_INCL_VERS
CHANGETIME	☐	☐ ICL_CHANGEUTC1
CHANGEDBY	☐	☐ ICL_CHANGEDBY
DELETED	☐	☐ ICL_RECSTATUS
INCLUDE	☐	☐ ICL_INCL_ORG3
CREATEDBY	☐	☐ ICL_CREATEDBY
CREATETIME	☐	☐ ICL_CREATEUTC
RES_G_CLAIM	☐	☐ Z_SZ_DISTR_G_FIL
RES_C_EXPERTISE	☐	☐ Z_SZ_DISTR_C_FIL
INFLATION_REGIME	☐	☐ Z_SZ_INFLTN_REG

Figure 5. Reserve Table Structure.

SAP		Data Browser: Table ZICLD_SZ_KASSTRO Select Entries										19	
✓ ▾ 🔍 📄													

Figure 6. Reserve Example.

3. Payment creation in the SAP system

For a claim with an approved timeline, it is possible to perform the compensation calculation and subsequently execute the payment. Once the timeline is approved, a button for compensation calculation appears on the claim. After the compensation has been calculated, this button is replaced by a payment execution button. In the background, complex functional modules for financial calculations are triggered. As a result, updates occur on the timeline, and a new payment node appears in the navigation tree, as shown in Figure 7.

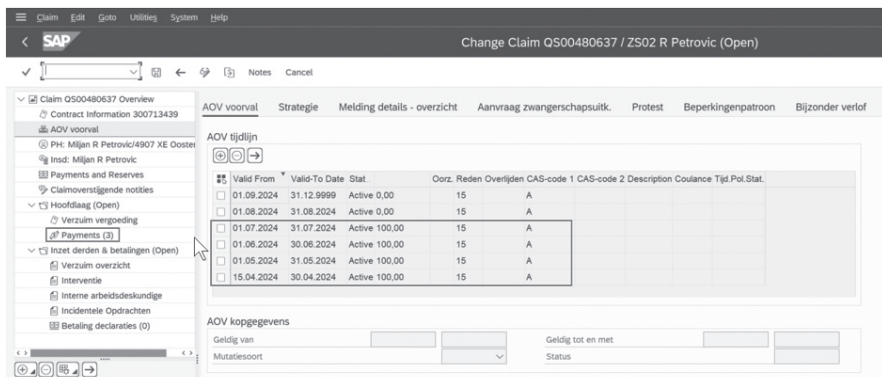


Figure 7. Compensation Calculation and Payment Creation.

The payment screen records all payments related to the claim, including the payment type (disbursement or refund), the amount, the currency of the payment or refund, and its current status. Based on the refund status, the system tracks whether the payment is still in the claims system, when it was sent to the accounting system, and when it was sent to the payment system. Another important data point recorded here is the document number. This document contains a payment listing by bank accounts on the Finance and Controlling (FICO) system side. The claim shown in Figure 8 has payments for three months.

A custom table, ZCM_RESERVE, has been created in the SAP system to track all changes in payments and reserves related to a specific claim (Figure 9). This table is not a standard SAP table but was developed specifically for the insurance company to monitor all relevant payment data not available in standard SAP tables. This table provides a more detailed view of amounts and cash flow movements. Some key data recorded in this table include:

1. *Reserve type* – different types of reserves are sent to different processing systems
2. *Reserve lot* – batch number for processing
3. *Document ref* – document number in the payment system
4. *Change Reason* – various reasons for amount changes such as payment, amount adjustment, different types of changes depending on refund type, and others.
5. The last three columns relate to specific amounts: the first column represents changes in payments, the second column represents changes in reserve levels, and the last column represents the reserve balance.

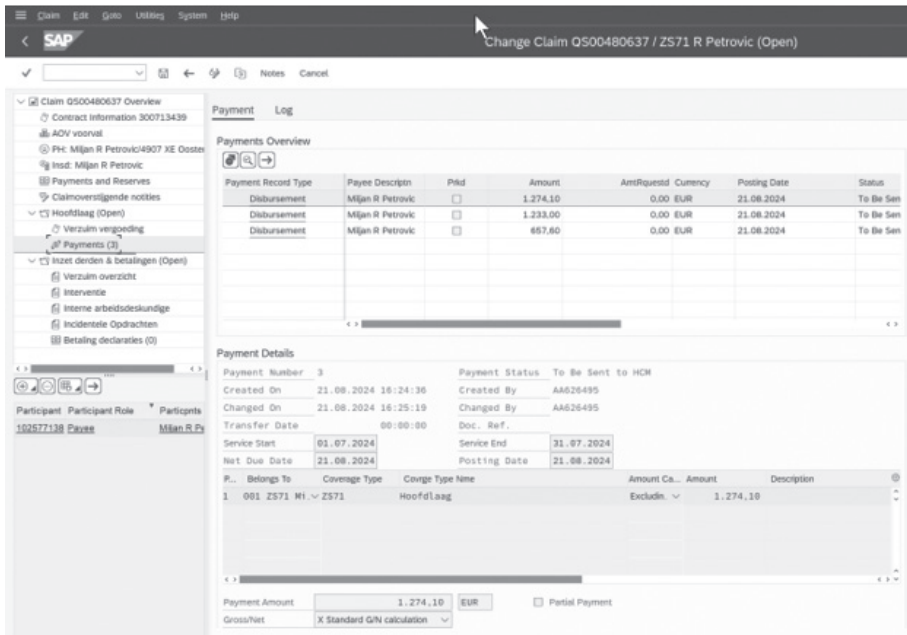


Figure 8. Payment Screen.

[illegible]

Figure 9. ZCM_RESERVE Table.

For the three payments made, the total amount is EUR 3.164,70. In the case of this claim, reserve calculation has not been performed, so the reserve balance is zero. Since the initial reserve balance is EUR 0, reserves must be increased to enable payment execution. The first row in the table, with change reason '00', represents the reserve adjustment for the amount required for payment. The second row represents the disbursement of that amount and the reduction of reserves back to zero.

3. Triggers in SAP

Transaction IMP_MANAGER initiates the trigger management program. It is used for manipulating transport objects, where objects are created and modified within one environment (e.g. the claims testing system) and then transported to

another environment (e.g. the financial management system). Triggers represent automated actions that occur during the transport of these objects from one environment to another. They are grouped into application classes according to their functionalities. After the triggers are created, it is necessary to assign the relevant objects, such as a business partner or claim to which they pertain, and subsequently the triggers are executed.

During the creation of claim requests and payments, several triggers are generated:

- 0HIRE trigger – associated with the insured party and during processing in the payment system the insured receives a unique number based on this trigger
- ZRECI – trigger for recovery of the insured party
- ZREILL – trigger for the insured party's medical issue
- 10015 – a separate trigger is created for each payment month; in this case, there are three triggers.

These three payment triggers are generated only after the payments from the claims system are sent to the payment system using a dedicated program. Access to programs in the SAP system is performed via transaction SE38. These triggers do not produce any changes in the claims system but are essential for processing claims in the payment system. Figure 10 shows the triggers related to the claim being processed in this example.

6 Trigger (AA626495 20240821 162416 Standard Workset)

App/Cla	Count	Trigger Ty	Exec.Date	Hash Value with Lgth32	IMP: Hash Value for All Parameters	Count	Application Class	Work	Trigger Ty
ZSGAO	6	10015		0AGHHZZMYC09X4GN			ZSGAOV	AA62	Payment f
ZSGAO	5	10015		0033HZPMVD1L5CHR			ZSGAOV	AA62	Payment f
ZSGAO	4	10015		058W93O3NY40P2TD			ZSGAOV	AA62	Payment f
ZSGAO	3	ZREILL					ZSGAOV	AA62	Call in sic
ZSGAO	2	ZRECI					ZSGAOV	AA62	Recovery
ZSGAO	1	0HIRE					ZSGAOV	AA62	Hire a per

Figure 10. Triggers for Claim QS480637.

4. Net Payment Calculation

HCM (*Human Capital Management*) refers to a set of applications used for recruiting, managing, and developing an organization's workforce. This software pertains to systems that contribute to process optimization and is often referred to as a *Human Resource Management System* (HRMS).

Some of the key functionalities include:

- employee experience management
- payroll calculation
- human resources analytics and workforce planning.³⁰

From the above definition and functionalities, it is evident that HCM is not part of the standard SAP insurance package. The implementation of the HCM module in insurance companies is uncommon. However, for the purposes of insurance and the specific project at hand, this system has been implemented to extend beyond traditional human resource management. Namely, within the payment process, HCM is utilized to calculate the net payment amount.

Triggers created in the previous step of the process are executed by HCM, whereby an ID (*identification number*) is generated for each insured party (SAP *business partner*) within this system. The output of the programs executed in HCM is a net payment specification, which is forwarded to the Claims Management system. Payments for each month are processed individually. Figure 11 shows the net calculation for the month of June. Similar calculations exist for May and July.

The net calculation from the HCM system is then transmitted to the CD (Collections & Disbursements) system, which is responsible for executing the payments.

Uitkeringsspecificatie Juni 20241

***** DIT IS EEN VOORBEELD GUS UITKERINGSSTROOK. NIET VOOR KLANTEN! *****

Dhr. R. Petrovic
Lijndonk 31
4907 XE Oosterhout

Achmea S&I Letsel
Laan van Malkenschoten 20
7333 NP Apeldoorn

PIG-nummer 40033882
Geb.datum 12.12.1986

	<u>Tabelloon</u>	<u>Bijz. bel.</u>	<u>Uitbetaling</u>
AOV Uitkering	1.233,00		1.233,00
Basis LH	1.233,00		
Loonheffing	455,83-		455,83-
WN-premie ZVW totaal			65,59-
Nettoloon			711,58
Te betalen bedrag			711,58

Figure 11. Net Calculation for the Month of June.

³⁰ <https://www.sap.com/westbalkans/about/what-is-sap.html>, accessed on 30 August 2024.

VII. Creation of Refunds in SAP

In the Claims Management system, a refund is generated when there is a change in the percentage indicating the extent to which a person is unable to perform their work. In the example considered, the initial percentage was 100%. If this percentage is reduced to, for instance, 0%, meaning the insured is again capable of performing their work, a refund must be processed for the period during which the percentage was modified. In the illustrated example, the percentage was changed to zero as of June 15, 2024, resulting in refunds being created for two months: June and July. No payments existed for August, so no refund applies for that month. The updated timeline is shown in Figure 12.

AOV tijdljn

Valid From	Valid-To Date	Stat.	Coorz.	Reden Overlijden	CAS-code 1	CAS-code 2	Description	Coulance	Tijd.Pol.Stat.
☐ 01.09.2024	31.12.9999	Active 0,00	15		A				
☐ 01.08.2024	31.08.2024	Active 0,00	15		A				
☐ 01.07.2024	31.07.2024	Active 0,00	15		A				
☐ 15.06.2024	30.06.2024	Active 0,00	15		A				
☐ 01.06.2024	14.06.2024	Active 100,00	15		A				
☐ 01.05.2024	31.05.2024	Active 100,00	15		A				
☐ 15.04.2024	30.04.2024	Active 100,00	15		A				

Figure 12. Timeline after modification.

The Payments screen in Figure 13 now displays two new refund entries with the status *Parked*.

SAP Change Claim Q500480639 / Z571 R Petrovic (Open)

Contract Information 300713443

AOV vooraf

PK: Ogjen R Petrovic/8043 HV Zvol

Inst: Ogjen R Petrovic

Payments and Reserves

Claimoverstijgende notities

Hoofdraag (Open)

Verzuim vergoeding

Payments (5)

Inzet derden & betalingen (Open)

Verzuim overzicht

Interventie

Interne arbeidsdeskundige

Incidentale Opdrachten

Betaling declaraties (0)

Payment Log

Payments Overview

Payment Record Type	Payee Description	Paid	Amount	AmstRequestid	Currency	Posting Date	Status
Refund	Ogjen R Petrovic	☒	0,00	2.547,89	EUR	28.08.2024	Parked
Refund	Ogjen R Petrovic	☒	0,00	1.315,04	EUR	28.08.2024	Parked
Disbursement	Ogjen R Petrovic	☐	2.547,89	0,00	EUR	27.08.2024	Execute Payment
Disbursement	Ogjen R Petrovic	☐	2.465,70	0,00	EUR	27.08.2024	Execute Payment
Disbursement	Ogjen R Petrovic	☐	1.315,04	0,00	EUR	27.08.2024	Execute Payment

Payment Details

Payment Number 5

Created On 28.08.2024 13:58:46

Changed On 00:00:00

Transfer Date 00:00:00

Service Start 01.07.2024

Net Due Date 18.09.2024

Payment Status Parked

Created By AAG26495

Changed By AAG26495

Doc. Ref.

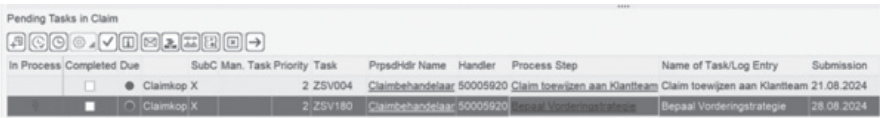
Service End 31.07.2024

Posting Date 28.08.2024

Figure 13. Refunds on the Payments screen.

1. Refund Processing

Upon creating a refund, a task is generated which must be completed by the Claims Manager, as shown in Figure 14.



In Process/Completed	Due	SubC Man.	Task Priority	Task	PrpsdHdlr Name	Handler	Process Step	Name of Task/Log Entry	Submission
☐			2	ZSV004	Claimbehandler	50005920	Claim toewijzen aan Klantteam	Claim toewijzen aan Klantteam	21.08.2024
☐			2	ZSV180	Claimbehandler	50005920	Bepaal Vorderingsstrategie	Bepaal Vorderingsstrategie	28.08.2024

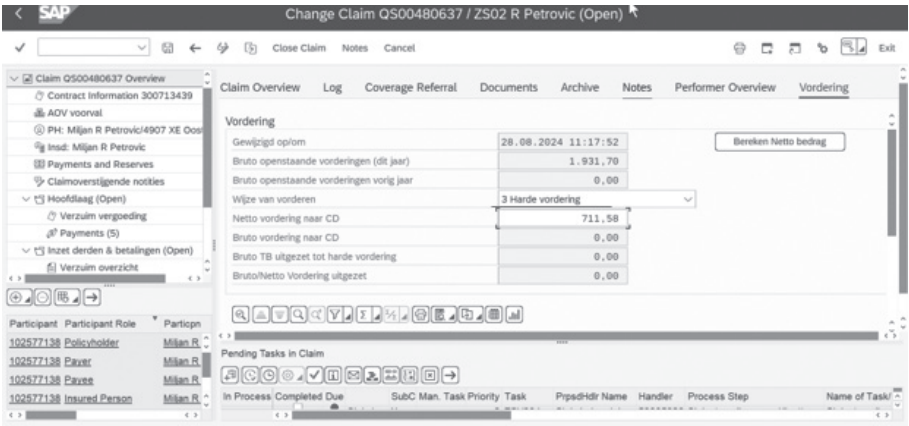
Figure 14. Tasks in SAP.

The concept of *tasks* in SAP is quite simple and corresponds to everyday use: a request for a person to perform an action. Tasks can be created automatically, as in this example, or manually. Task ZSV180 must be completed by the claims manager. By clicking on the *process step*, the user is redirected to the refund screen where the refund process continues. Depending on the refund type selected, the screen fields change accordingly, since different refund types require different data. The subsequent processing follows the same workflow.

The refund types are:

1. maximum calculation – refund of the entire amount
2. instalment calculation – refund in installments
3. direct refund – refund of the entire net amount
4. payment waiver – the insured may be exempted from repaying part or all of the amount.

In this example, the refund will be processed as a direct refund. Selecting option 3 for direct refund results in the screen shown in Figure 15.



Vordering	
Gewijzigd op	28.08.2024 11:17:52
Bruto openstaande vorderingen (dit jaar)	1.931,70
Bruto openstaande vorderingen vorig jaar	0,00
Wijze van vorderen	3 Harde vordering
Netto vordering naar CD	711,58
Bruto vordering naar CD	0,00
Bruto TB uitgezet tot harde vordering	0,00
Bruto/Netto Vordering uitgezet	0,00

Figure 15. Direct refund.

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Clicking the button *Bereken Netto bedrag* (calculate net amount) populates the field *Netto vordering naar CD* (net claim to CD). Saving the changes and approving the amount by the claims manager creates a new refund entry on the payments screen with status *Requested*, as shown in Figure 16.

The ZCM_RESERVE table is updated with new rows for each change. When the percentage changed, two refund entries with status *Parked* were created on the payments screen. These are consolidated into a single row with change reason ZT in the ZCM_RESERVE table. Processing the refund creates a new row with change reason ZX. The updated table is shown in Figure 17.

As mentioned in section 5.3 Creation of Payments in SAP System, there are different reserve types. In this table, reserve types S6 and SA are visible. Reserve type S6 is sent to the FICO (*Financial Accounting and Controlling*) system, while reserve type SA is sent to the IA (*Insurance Analyzer*) system.

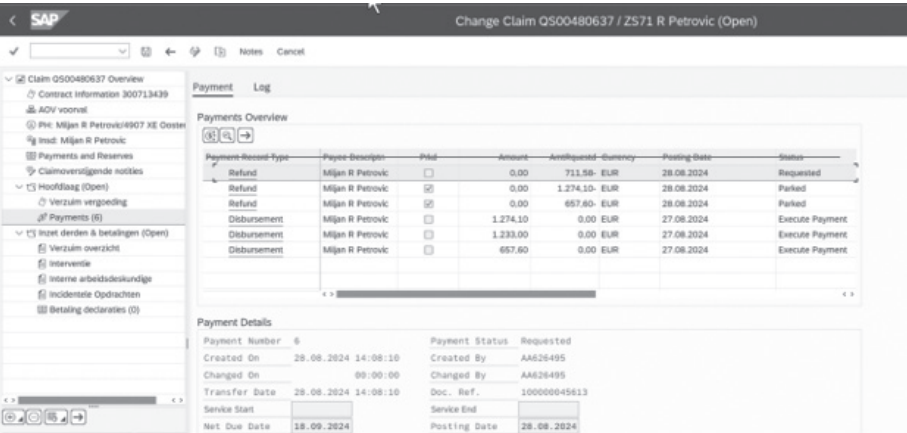


Figure 16. Direct refund on the Payments screen.

Table: ZCM_RESERVE

SUBEL	RESERVE	CURS	CHANGENUM	CHANGETIME	CHANGEREASON	DELETED	CREATETIME	GROSSRES	CHANGEREASON	RESERVELOT	ENDRES	DOCUMENTREF	PAYMADJUSTANT	RESADJUSTANT	REMBEANT
001	S6	EUR	000001	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164.70	00	0000000008113	000043	2600000843	0.00	3.164.70	3.164.70
001	S6	EUR	000002	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164.70	03	0000000008113	000201	2600000843	3.164.70-	3.164.70-	0.00
001	SA	EUR	000003	20.240.828.091.752	AA626495	0	20.240.828.091.752	3.164.70	ZT				1.931.70	1.931.70	1.931.70
001	SA	EUR	000004	20.240.828.120.810	AA626495	0	20.240.828.120.810	3.164.70	ZX				0.00	711.58	1.931.70
001	SA	EUR	000005	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164.70	00	ADVSA8	000000	ADVSA8	0.00	3.164.70-	3.164.70-
001	SA	EUR	000006	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164.70	03	ADVSA8	000000	ADVSA8	3.164.70-	3.164.70-	0.00
001	SA	EUR	000007	20.240.828.091.752	AA626495	0	20.240.828.091.752	3.164.70	ZT				1.931.70	1.931.70	1.931.70
001	SA	EUR	000008	20.240.828.120.810	AA626495	0	20.240.828.120.810	3.164.70	ZX				0.00	711.58	1.931.70

Figure 17. ZCM_RESERVE table after refund.

Rows in the table with change reasons 00 and 03 are processed by the Human Capital Management (HCM) system and sent to the Collections & Disbursements (CD) system, as well as to the Financial Accounting and Controlling (FICO) system. The fields *RESERVELOT* and *DOCUMENTREF* can also be seen for these two rows. For the new rows created during the refund process, transmission is performed manually.

2. Refund Transmission to FICO

SAP FICO (Financial Accounting and Controlling) is an integral module within the SAP ERP set that enables organizations to efficiently manage their financial processes and make informed decisions. SAP FICO plays a key role in helping enterprises streamline financial operations, gain insights, and ensure compliance. It consists of two primary modules – Financial Accounting (FI) and Controlling (CO). SAP FI focuses on accounting and financial reporting, while SAP CO concentrates on cost tracking.

a) Financial Accounting (SAP FI)

The SAP Financial module is dedicated to generating and managing financial statements and reports. The SAP FI module comprises several submodules:

- *General Ledger* - this module serves as the central component for financial reporting. It integrates various accounting transactions recorded in submodules and provides a comprehensive overview of the organization's financial position according to the chart of accounts.³¹ In large enterprises, General Ledger transformation focuses on standardizing the use of coding blocks within the ERP FI-GL module employed. This transformation enables the utilization of most available coding blocks in the ERP module, resulting in financial statements produced according to different criteria such as profit centers, products, or accounts.³²
- *Accounts Payable* - this module handles vendor invoice management, payments, automatic payment programs, reporting, and other supplier-related transactions.
- *Accounts Receivable* - SAP FICO manages the entire receivables process, from invoice creation to payment receipt. This submodule oversees customer accounts and transactions including invoices, credit memos, customer reports, and related functions.
- *Asset Accounting* - this SAP asset accounting module enables organizations to manage fixed assets such as land, equipment, and real estate. It covers transactions related to retirement, depreciation, revaluation, and similar processes.
- *Bank Ledger* - this module manages transactions associated with the company's bank account information, reconciling bank statement transactions with those recorded in SAP submodules.

³¹ <https://webtel.in/Blog/SAP-FICO-Module-and-Sub-Modules/1343>, accessed on 3 September, 2024.

³² Bhuvnesh Kumar, „Impact and Need for Financial Transformation in the Insurance Industry Using ERP”, *Journal of Enterprise Resource Planning Studies*, 2018/2018, 2.

b) Financial Controlling (SAP CO)

The SAP Controlling module focuses on monitoring and reporting business operation costs. The SAP CO module includes several submodules, described below:

- Cost Element Accounting: tracks costs and revenues associated with various business activities, providing detailed insight into cost structures and enabling cost control.
- Cost Center Accounting: allows organizations to allocate costs to specific cost centers, aiding in departmental cost tracking and optimization.
- Profit Center Accounting: enables businesses to analyze profit and loss at the level of individual business units or profit centers, providing granular financial performance views.
- Internal Orders: facilitate tracking and management of internal projects, ensuring costs remain controlled and resources are used efficiently.³³

Payments from the claims management system are transmitted to FICO in two steps:

1. *Lot creation*
2. *Lot processing* (transmission of the lot to FICO).

c) Lot Creation

The creation of a *payment lot* is performed via transaction ZFCD_CM_RE-SERVE. Within the same transaction, the program for transmitting the lot to FICO is also located. The first screen is used for lot creation, where only the claim number needs to be entered and executed – see Figure 18.

³³ <https://webtel.in/Blog/SAP-FICO-Module-and-Sub-Modules/134>, accessed on 3 September, 2024.

✓

Cancel

Processing modus

●

Lot creation

○

Lot processing

Run option

□

Simulation

Lot creation

Lot processing

Filter options

Processing option

1 Normal processi. ▾

Reserve Type

to

Internal Claim Type

to

Claim Number

QS00480637

to

Changed On

to

01.09.2024

□

Do not aggregate items

Output options

Reserve Changes

○

Reserve Lot Header

○

Reserve Lot Lines

○

Log

●

Layout

Figure 18. Lot Creation.

d) Lot Transmission to FICO

The transmission of the lot to FICO is performed using the same transaction as the lot creation. The *lot processing* screen is located adjacent to the lot creation screen. The required data to be entered include the lot number and the FICO subsystem to which the lot is being sent. Figure 19 shows the lot number created in the previous step and the target system: HIACLNT400_TRUSTED.

As a result of this process, a new document and its number are generated in the FICO system – see Figure 20.

✓ [dropdown] [icon] [icon] [icon] Cancel

Processing modus

☐ Lot creation
☒ Lot processing

Run option

☐ Simulation

Lot creation **Lot processing**

Filter options

Reserve Lot	8397	to		[icon]
Created By		to		[icon]
Created On		to		[icon]
Created At	00:00:00	to	00:00:00	[icon]
Company Code		to		[icon]
Posting Date	01.09.2024			
Document Type	CM			

Aansturing voor boeking direct in FICO1 (nieuwe werkwijze juni 2021)

RFC Destination: H1ACLNT400_TRUSTED [icon]

Output options

Document Header	☐	Document Positions	☐
Document Currency Fields	☐	Extension table	☐
Log	☒		

Figure 19. Lot Transmission to FICO.

Number of Log entries 5

Exception	Claim No.	Subclaim Res.	Type	Sequens	Description	Paym	Adj	Res	Adj	Receiv	Reserve Lot	Indep.	Reserve	Reserve
OCW	n.a.				Document posted successfully: ICLRS 000000008397 I	0,00	0,00	0,00						0,00
OCW	n.a.				Documentnummer: 2600000004	0,00	0,00	0,00						0,00
OCW	n.a.				Saving update to reserve lot header (iclindres)	0,00	0,00	0,00						0,00
OCW	n.a.				Saving update to reserve changes (zcm_reserve)	0,00	0,00	0,00						0,00
OCW	n.a.				FICO-document:2600000004.created.from:Reserve-Lot.000000008397	0,00	0,00	0,00						0,00

Figure 20. FICO Document Creation.

e) Result of Transmission to FICO

The ZCM_RESERVE table is automatically updated by this process: for the entries related to the refund, values for the RESERVELOT and DOCUMENTREF fields now exist, as shown in Figure 21. As stated earlier, only entries with reserve type S6 are transmitted to FICO.

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Table: ZCM_RESERVE
Fixed Columns: 2,3,4 List Width: 6250

BUSCL	RESTYPE	CURR	CHANGENR	CHANGETIME	CHANGEDBY	DELETED	CHGATETIME	GROSSRES	CHANGEREASON	RESERVELOT	INDEXES	DOCUMENTREF	PAYMDOJUSTART	RESACJART	RENEBJSART
001	SA	EUR	000001	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164.70	00	000000008313	000043	26000009043	0.00	3.164.70	3.164.70
001	SA	EUR	000002	20.240.821.221.623	AA626495	0	20.240.821.142.436	3.164.70	03	000000008313	000021	26000009043	3.164.70	3.164.70	0.00
001	SA	EUR	000003	20.240.828.122.229	AA626495	0	20.240.828.091.752	3.164.70	27	000000008397	000061	2600000904	1.931.70	1.931.70	1.931.70
001	SA	EUR	000004	20.240.828.122.229	AA626495	0	20.240.828.120.810	3.164.70	2X	000000008397	000003	2600000904	0.00	711.58	1.931.70
001	SA	EUR	000005	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164.70	06	ADVAS8	000000	ADVAS8	0.00	3.164.70	3.164.70
001	SA	EUR	000006	20.240.821.221.527	AA626495	0	20.240.821.142.436	3.164.70	03	ADVAS8	000000	ADVAS8	3.164.70	3.164.70	0.00
001	SA	EUR	000007	20.240.828.122.229	AA626495	0	20.240.828.091.752	3.164.70	27	ADVAS8	000000	ADVAS8	1.931.70	1.931.70	1.931.70
001	SA	EUR	000008	20.240.828.122.229	AA626495	0	20.240.828.120.810	3.164.70	2X	ADVAS8	000000	ADVAS8	0.00	711.58	1.931.70

Figure 21. Updated ZCM_RESERVE Table after Transmission to FICO.

The RFC destination for this lot is the system HIACLNT400_TRUSTED. When a user logs into the HIA system with client 400, they can access the document. Documents are accessed via transaction FB03, where the document number must be entered, in this case: 2600000904. Figure 22 shows the document providing a detailed overview of cash amounts and the accounts to which they were posted.

Documentoverzicht - weergeven

Doc.srt : CM (Claims management) Normal document
Documentnr. 2600000904 Bedrijfsj. 2070 Boekjaar 2024
Doc.datum 28.08.2024 Boekingsdatum 28.08.2024 Periode 08
Belast. berek. EUR
Doc.valuta EUR
Doc.koptekst Reserve Lot 000000008397

Pos	Es	Rekening	Korte tekst rekening	Bedrag	CodeBrons	PrCtr	Toewijzing	Val.	Bes	HSD	Bdr	Werk	OKan	Propositie	Werk	IND/COL	Schadejaar	SA
1	50	711635	voorziening schade	1.931,70	490	6150010	56	EUR	190	2070	AVE	05	46P0AIA90000	PART	IND	2024	NL	
2	40	72400500	Nutatie voorziening	1.931,70	490	6150010	56	EUR	2070	AVE	05	46P0AIA90000	PART	IND	2024	NL		
3	50	7211000	Betaalde schade via	1.931,70	490	6150010	56	EUR	2070	AVE	05	46P0AIA90000	PART	IND	2024	NL		
4	40	10100005	Terug te vold. uitk.	1.931,70	490	6150010	56	EUR	2070									
5	50	10100005	Terug te vold. uitk.	711,58	490	6150010	56	EUR	2070									
8	40	13110005	TW TW bet. uitk. FICOG	711,58	490	23100000	56	EUR	2070									

Figure 22. FICO Document 1.

3. Refund Transmission to IA

SAP Insurance Analyzer and the additional SAP FRDP (*Financial Risk and Data Platform*) components represent the most advanced applications for financial management and risk management in insurance companies, facilitating the implementation of relevant IFRS 4/9/17 and Solvency regulations. SAP Insurance Analyzer consists of the components *Accounting for Insurance Contracts* and *SAP Solvency Management for Insurance*.³⁴

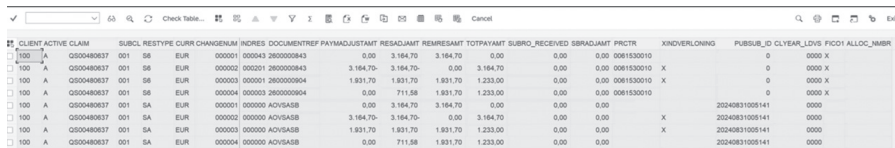
The transport to IA is not a manual process, it is performed via a scheduled Job in SAP. A Job is a background task executed in SAP at a scheduled time. Jobs and job steps allow complex tasks to be treated as units. Several programs necessary to complete a task can be scheduled as steps within one job, providing the advantage of having a single logical container for all steps required to complete the task.

Job steps operate partially independently from one another. That is, an abnormal termination of one job step does not roll back the work of the previously completed job step if that previous step has performed a *commit*. However, if any

³⁴ <http://www.gwantec.de/en/services-sap-en/sap-insurance-analyzer>, accessed on 30 September, 2024.

job step fails, the entire job fails. No further job steps are executed, and the job status changes to *canceled*.³⁵

In the observed example, the *Job* is scheduled to run daily at 18:00. Upon completion, the data becomes available in IA for further processing, and the PUBSUB_ID value can be seen in the ZCM_RESERVE table within the claims management system. As previously mentioned, if the *reserve type* is S6, data is sent to FICO. The type SA is sent to *Insurance Analyzer*, which is why in Figure 23, PUBSUB_ID has a value of 0 for *reserve type* S6 and a value of 202408311005141 for type SA.



CLIENT	ACTIVE CLAIM	SUBCL	RESTYPE	CURR	CHANGENAM	INDRES	DOCUMENTREF	PAYMAJUSTAMT	RESADIAMT	REMRISAMT	TOTPAYAMT	SUBRO	RECEIVED	SBRADIAMT	PRCTR	XINXOVERLONING	PUBSUB_ID	CLYEAR_LOVIS	FIC01	ALLOC	JAMBR
100	A	Q500480837	001	S6	EUR	000001	000043	3800000843	0,00	3.164.70	3.164.70	0,00	0,00	0,00	0001530010	X	0	0000	X		
100	A	Q500480837	001	S6	EUR	000002	000021	3800000843	3.164.70	3.164.70	0,00	3.164.70	0,00	0,00	0001530010	X	0	0000	X		
100	A	Q500480837	001	S6	EUR	000003	000001	3800000804	1.931.70	1.931.70	1.931.70	1.233.00	0,00	0,00	0001530010	X	0	0000	X		
100	A	Q500480837	001	S6	EUR	000004	000003	3800000804	0,00	711.58	1.931.70	1.233.00	0,00	0,00	0001530010	X	0	0000	X		
100	A	Q500480837	001	SA	EUR	000001	000000	ADVISASB	0,00	3.164.70	3.164.70	0,00	0,00	0,00			202408311005141	0000			
100	A	Q500480837	001	SA	EUR	000002	000000	ADVISASB	3.164.70	3.164.70	0,00	3.164.70	0,00	0,00	X		202408311005141	0000			
100	A	Q500480837	001	SA	EUR	000003	000000	ADVISASB	1.931.70	1.931.70	1.931.70	1.233.00	0,00	0,00	X		202408311005141	0000			
100	A	Q500480837	001	SA	EUR	000004	000000	ADVISASB	0,00	711.58	1.931.70	1.233.00	0,00	0,00			202408311005141	0000			

Figure 23. Updated ZCM_RESERVE Table after Transmission to IA.

4. Refund Transmission to CD

Another system involved in this complex process is CD *Collections and Disbursements*. After a payment is created in the claims management system, the further calculation of the net payment is performed in the HCM system, which communicates directly with the CD system and sends the payment for further processing and execution. In the case of a refund, it is transmitted directly from the claims management system to the payment system (CD).

Collections and disbursements are at the core of operations, and most *Legacy systems* simply lack the functionality to create seamless interactions demanded by today's customers. SAP *Collections and Disbursements* (FS-CD) is the primary operational module providing robust functionality for managing receivables, collections, payment processing, and agent/broker commission management.³⁶

As a settlement system, CD must be equipped with the necessary settlement data from administrative systems such as Incentive and Commission Management (FS-ICM), Claims Management (FS-CM), Reinsurance Management (FS-RI), and Policy Management (FS-PM). An open interface is available for this purpose.³⁷ Figure 24 shows the position of CD as a settlement system within a possible system landscape.

³⁵ https://help.sap.com/doc/saphelp_nw73ehp1/7.31.19/en-US/4b/2bc12b4c594ba2e10000000a42189c/content.htm?no_cache=true, accessed on 30 September, 2024.

³⁶ <https://www.msg-global.com/solutions/sap-fscd-collections-and-disbursements>, accessed on 2 September, 2024.

³⁷ https://help.sap.com/docs/SAP_ERP/531a600f03624826bdcd98f6f723ef1b/c174cb53f0f67314e-10000000a174cb4.html, accessed on 2 September, 2024.

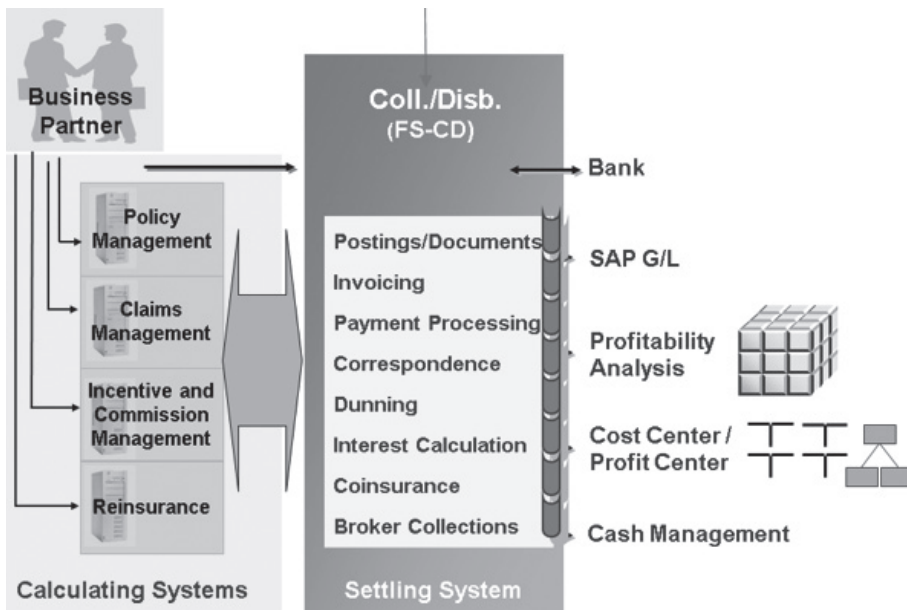


Figure 24. Integration of CD with other systems.³⁸

Communication between the claims management system and CD occurs in two steps:

1. Creation of payment and transmission to CD – *payment lot*
2. Transmission of the *info container* from CD to CM.

a) Payment Creation and Transmission to CD

In the claims management system, transaction FP05 is used to create a payment lot and send that lot to the payment system (FS-CD). The screen for creating a new payment lot is very simple: only a unique ID number must be entered and the create button clicked. Two important buttons are *close* and *post*. A lot can contain multiple payments, and as long as the user does not close it, new payments can be added. Clicking *close* locks the lot for new payments, and clicking *post* sends the lot to CD.

Before closing and sending, payments must be added to the lot. Figure 25 shows a new payment lot. Some fields are automatically filled based on system

³⁸ https://help.sap.com/docs/SAP_ERP/531a600f03624826bcd98f6f723ef1b/c174cb53f0f67314e10000000a174cb4.html, accessed on 2 September, 2024.

configuration, while others must be entered by the user. *Currency, Bank clearing account, and Company code* are user inputs. Clicking the *New items* button opens the screen for adding payments.

✓ [dropdown] [icon] New Items Cancel

Control Information

Lot	AB20241607A7	Status	Payments can still be added
Search Term			
Additional info			
Items	0	Items specified	
Debit total	0,00	Debit specified	
Credit total	0,00	Credit specified	

Specifications for posting documents

Document Type	70	Posting Date	01.09.2024	Document Date	01.09.2024
Reconciliation Key	AB20241607A7	Currency	EUR	Exchange rate	

Specifications for posting items on the bank clearing account

Bank clrg acct	13918750	Value date		☐ Line item
Company Code	2070	Business Area		
		Profit Center		

Specifications for selecting and clearing open items

Clearing Reason	01	Selection Cats.	6 3 7
-----------------	----	-----------------	-------

Specifications for Entry

Line Layout	SAP [icon] [icon] Hold
-------------	------------------------

Figure 25. Creating a New Payment Lot for CD.

To add a payment, the amount and document number linked to that payment must be entered on the FS-CM payments screen (Figure 26). Full payments can be processed at once, or the amount can be split into multiple parts within one lot, or even sent in different payment lots. After closing the lot with the *close* button, it can be sent to FS-CD by clicking the *post* button.

✓ [dropdown] [icon] Details [icon] Delete item [icon] Change item

Default values and status

Lot	AB20241607A7	Debit total	711,58
Bank clrg acct	13918750	Credit total	0,00
Company Code	2070	Items	1

Payments

S...	Payment amount	1 Selection Value 1	2 Selection Value 2	Bank Num
☐	711,58	1 100000045613	3	
☐		6	3	

Figure 26. Adding Payments to the Lot.

b) Transmission of Info Container from CD to CM

From the claims management system side, a request is sent to the FS-CD system to transmit the so-called *info container*. The information container functionality in the CD domain is a key business process in SAP Insurance, where info containers store data that can be sent to external systems at a later time. This is a very useful SAP feature enabling interaction with external systems without extensive coding. Activities involved in this process include:

- information type (category)
- confirmation
- storing confirmation in the info container
- forwarding and reading confirmations
- display of info containers.³⁹

The transaction for creating info containers is FFINFCO1. It requires entering an ID composed of a date and a six-character identification number, as well as the *Contract* – the claim number. Additional technical settings are available on a secondary screen, along with a screen for reviewing executed programs – *Logs*. Once the parameters are saved, the *Schedule Program Run* button can be clicked to execute the program immediately or schedule it for a future time.

Several outcomes result from this process:

1. The refund status on the payments screen changes from *Requested* to *Received* (Figure 27),

Payment Record Type	Payee Description	Prid	Amount	Antirequest	Currency	Posting Date	Status
Refund	Miljen R Petrovic		711.59		EUR	28.08.2024	Received
Refund	Miljen R Petrovic		0.00	1.274.10	EUR	28.08.2024	To Be Sent to HCM
Refund	Miljen R Petrovic		0.00	657.60	EUR	28.08.2024	To Be Sent to HCM
Disbursement	Miljen R Petrovic		1.274.10	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljen R Petrovic		1.233.00	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljen R Petrovic		657.60	0.00	EUR	27.08.2024	Execute Payment

Payment Details	
Payment Number	6
Created On	28.08.2024 14:08:10
Created By	AA626495
Changed On	28.08.2024 16:43:16
Changed By	Z_RFC_PI
Transfer Date	28.08.2024 14:08:10
Doc. Ref.	100000045613
Service Start	
Service End	

Figure 27. Refund Status Changed to Received.

³⁹ <https://community.sap.com/t5/sap-for-insurance-blogs/sap-fscd-information-container-functionality/ba-p/13146814>, accessed on 2 September, 2024.

2. The ZCM_RESERVE table is updated with a new entry for reason code ZU (Figure 28),

[illegible]

Figure 28. ZCM_RESERVE Table Update after Received Refund.

3. An XML file is sent from the FS-CD system to the FS-CM system (Figure 29).

The screenshot shows the SAP Fiori 'Display XML Message Versions' application. The left-hand navigation pane is expanded, showing the 'XML Message' section. The main content area displays the XML structure of the message, which is a 'CashFlowDocumentCreated'. The XML includes various fields such as 'DocumentNumber', 'CreationDate', 'CreationTime', and 'CreatedBy'. The XML is displayed in a structured, indented format, showing the hierarchy of the message components.

Figure 29. XML File.

5. Final Refund Processing in FICO, IA, and HCM

To finalize the process, the last modification in the ZCM_RESERVE table must be transmitted to both FICO and IA, specifically by sending the row with the change reason code ZU. The series creation and series transport to FICO process is repeated. The *job* responsible for transport to IA completes automatically. On the FICO side, a new document is generated, shown in Figure 30. The last two lines of the document pertain to the refund processed in this example.

The HCM system re-triggers the *business partner*-related processes and recalculates the net payment amount for the three months in which payments exist. At

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the end of the process, HCM sends a letter containing the net payment specification to the insured party (Figure 31).

Documentverzicht - weergeven																		
Doc.srt : CM (Claims management) Normal document																		
Documentnr. : 2400000906 Beoordijfswr. : 2070 Boekjaar : 2024																		
Belast. datum : 29.08.2024 Boekingsdatum : 28.08.2024 Periode : 08																		
Doc.valuta : EUR																		
Doc.koptekst : Reserve Lot 000000008399																		
Pos	As	Rekening	korte tekst rekening	Bedrag	CodeBrons.	PrCtr	Toewijzing	Val.	Bus	MSO	Schur	Nerik	Okan	Propositie	Mark	IND/COL	Schadejaar	SA
52	50	7311635	voorziening schade	5.273,73	490	61520051	S6	EUR	186	2070	LPO	02		46P01A80000	PART	IND	2024	NL
53	40	72400500	Mutatie voorziening	1.273,91	490	61130010	S6	EUR						46P01C90000	PART	IND	2024	NL
54	50	7311635	voorziening schade	1.273,91	490	61330010	S6	EUR	186	2070	LPO	02		46P01C90000	PART	IND	2024	NL
55	40	72400500	Mutatie voorziening	750,00	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
56	50	7311635	voorziening schade	750,00	490	61340010	S6	EUR	186	2070	LPO	02		46P01C90000	PART	IND	2024	NL
57	40	72400500	Mutatie voorziening	6.528,63	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
58	50	7311635	voorziening schade	6.528,63	490	61340010	S6	EUR	186	2070	LPO	02		46P01C90000	PART	IND	2024	NL
59	40	72400500	Mutatie voorziening	3.894,00	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
60	50	7311635	voorziening schade	3.894,00	490	61340010	S6	EUR	186	2070	LPO	02		46P01C90000	PART	IND	2024	NL
61	40	72400500	Mutatie voorziening	3.794,21	490	61130010	S6	EUR						46P01C90000	PART	IND	2024	NL
62	50	7311635	voorziening schade	3.794,21	490	61330010	S6	EUR	186	2070	LPO	02		46P01C90000	PART	IND	2024	NL
195	40	7311635	voorziening schade	5.273,73	490	61120051	S6	EUR	190	2070	LPO	02		46P01A80000	PART	IND	2024	NL
196	50	72400500	Mutatie voorziening	5.273,73	490	61320051	S6	EUR						46P01A80000	PART	IND	2024	NL
197	40	72011000	Betaalde schade via	5.273,73	490	61120051	S6	EUR						46P01A80000	PART	IND	2024	NL
198	50	73120044	Tr. Inlezen Items HCM	5.273,73	490	54500900	S6	EUR										
199	40	7311635	voorziening schade	1.273,91	490	61130010	S6	EUR	190	2070	LPO	02		46P01C90000	PART	IND	2024	NL
200	50	72400500	Mutatie voorziening	1.273,91	490	61330010	S6	EUR						46P01C90000	PART	IND	2024	NL
201	40	72011000	Betaalde schade via	1.273,91	490	61130010	S6	EUR						46P01C90000	PART	IND	2024	NL
202	50	73120044	Tr. Inlezen Items HCM	1.273,91	490	54500900	S6	EUR										
203	40	7311635	voorziening schade	750,00	490	61140010	S6	EUR	190	2070	LPO	02		46P01C90000	PART	IND	2024	NL
204	50	72400500	Mutatie voorziening	750,00	490	61340010	S6	EUR						46P01C90000	PART	IND	2024	NL
205	40	72011000	Betaalde schade via	750,00	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
206	50	73116069	Tr. Inlezen Items HCM	750,00	490	21200000	S6	EUR										
207	40	7311635	voorziening schade	6.528,63	490	61140010	S6	EUR	190	2070	LPO	02		46P01C90000	PART	IND	2024	NL
208	50	72400500	Mutatie voorziening	6.528,63	490	61340010	S6	EUR						46P01C90000	PART	IND	2024	NL
209	40	72011000	Betaalde schade via	6.528,63	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
210	50	73120044	Tr. Inlezen Items HCM	6.528,63	490	54500900	S6	EUR										
211	40	7311635	voorziening schade	3.894,00	490	61140010	S6	EUR	190	2070	LPO	02		46P01C90000	PART	IND	2024	NL
212	50	72400500	Mutatie voorziening	3.894,00	490	61340010	S6	EUR						46P01C90000	PART	IND	2024	NL
213	40	72011000	Betaalde schade via	3.894,00	490	61140010	S6	EUR						46P01C90000	PART	IND	2024	NL
214	50	73116069	Tr. Inlezen Items HCM	3.894,00	490	54500900	S6	EUR										
215	40	7311635	voorziening schade	3.794,21	490	61130010	S6	EUR	190	2070	LPO	02		46P01C90000	PART	IND	2024	NL
216	50	72400500	Mutatie voorziening	3.794,21	490	61330010	S6	EUR						46P01C90000	PART	IND	2024	NL
217	40	72011000	Betaalde schade via	3.794,21	490	61130010	S6	EUR						46P01C90000	PART	IND	2024	NL
218	50	73120044	Tr. Inlezen Items HCM	3.794,21	490	54500900	S6	EUR										
303	50	10100001	Terug te vold wijk	1.931,80	490	61130010	S6	EUR										
306	40	73120044	Tr. Inlezen Items HCM	1.931,80	490	54500900	S6	EUR										

Figure 30. FICO Document 2.

VERTOUWELIJK

R. Petrovic
Lijndenk 31
4907 XE Oosterhout

Datum : 30 augustus 2024 Ons kenmerk : 0102577138

Onderwerp : Uw arbeidsongeschiktheidsuitkering

Uitkeringsspecificatie augustus 2024

Loonheffingskorting : Nee
Tabekkies : Groen

Omschrijving	Periode	Inhouding	Bedrag
AOV Uitkering QSO480637	01-06-2024 t/m 31-07-2024		€ -1.931,70
INHOUDINGEN			
Bijdrage ZVW		€ -102,76	
Loonheffing		€ -713,88	
Loonheffingen		€ -816,64	
Totaal inhoudingen		€ 816,64	
Netto uitkering		€ -1.115,06	
Vordering: bedrag voldaan		€ 711,58	
Vordering: door ons betaald		€ 403,48	
Saldo		€ 0,00	

Figure 31. Net Specification Letter to the Insured.

The claims management system also reflects that the process has been fully completed (Figure 32). The refund status on the payments screen changes to *Completed*.

Payment Record Type	Payee Descriptn	Pkid	Amount	AmtRequestd	Currency	Posting Date	Status
Refund	Miljan R Petrovic	☐	711.58				Received
Refund	Miljan R Petrovic	☐	0.00	1,274.10	EUR	30.08.2024	Completed
Refund	Miljan R Petrovic	☐	0.00	657.60	EUR	30.08.2024	Completed
Disbursement	Miljan R Petrovic	☐	1,274.10	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic	☐	1,233.00	0.00	EUR	27.08.2024	Execute Payment
Disbursement	Miljan R Petrovic	☐	657.60	0.00	EUR	27.08.2024	Execute Payment

Figure 32. Refund Status Changed to Completed.

VIII. Conclusion

The analysis of the payment process within the SAP ERP system clearly demonstrates the significance of ERP systems in modern business environments. The SAP ERP system is capable of providing organizations with full integration of all necessary systems required to execute complex processes. This paper presented a single example of such a process involving five integrated systems. The process is fully supported with a high degree of automation, and the demonstrated solution facilitates employees in performing daily operations. This example highlights the efficiency of SAP both as an ERP system and as a solution for companies seeking ways to improve their market position. For companies, centralizing the payment process is crucial to ensure better control and monitoring of costs.

In the future, further development of SAP systems follows advanced technologies such as AI and machine learning, which have the potential to enhance numerous processes and enable SAP to continuously provide organizations with high-quality management solutions.

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