



Actuarial Assessment for the New Workers' Compensation Scheme

## Final Report

Marshall Islands Social Security Administration

May 2023

25 May 2023,

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Dear Bryan,

***Actuarial Assessment for the New Workers' Compensation Scheme. Final report for Marshall Islands Social Security Administration***

Please find enclosed our final report for the actuarial assessment of the new Workers' Compensation Scheme for the Marshall Islands Social Security Administration.

We understand you will use this report in your discussions with the insurers that will underwrite the private sector, and for consideration in setting up the Government Self-funded Workers' Compensation Scheme for the public sector and review of the Special Disability Fund.

if you have any questions, please do not hesitate to call Niki on (+61 402 095 724) or Rick on (+61 458 988 779)

Your sincerely



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# 1. Key Recommendations

This report focuses on enabling the commencement of the Marshall Island Workers Compensation Scheme ("MI WC Scheme"), providing advice to assist Marshall Islands Social Security Administration ("MISSA") in negotiations with insurers for adequate market-based premiums, and estimating annual contributions for the Government Self-Funded Workers Compensation Scheme ("GSFWC") and considerations for the Special Disability Fund ("SDF"). Key recommendations from our analysis:

- Given the private sector will be underwritten by the two existing insurers and they have advised they will be using the same underwriting process they use in Commonwealth Northern Mariana Islands ("CNMI") to determine premiums, the CNMI industry rates are a useful starting point. From our analysis we recommend Marshall Islands ("MI") premiums should be based on MI industry tariffs that are 40% of the CNMI industry tariffs.
- We recommend \$500,000 USD per annum is used to fund benefits and cover management expenses under GSFWC Scheme that will cover the public sector
- MISSA is considering the adequacy and viability of the SDF for the new MI WC Scheme. The current legislation stipulates a 2% levy on premiums from the private sector and allowing a similar level on annual contributions from the GSFWC Scheme, will provide accumulated funds to cover 2 claims on the SDF over 5 years, 3 claims over 7 years and 5 claims over 10 years.

It will be important for MISSA to establish correct data capture and tailored monitoring and reporting processes before the scheme commences. The following sets out initial recommendations for MISSA to consider:

- A Map should be designed to guide MISSA in developing a rigorous Framework, starting with baseline minimum requirements and progressing to include a full consideration across the whole scheme. A skeleton Map is suggested in section 7.1.
- Data considerations including:
  - Determining the complete policy detail and claim element requirements required for the monitoring and reporting processes
  - Identify the data elements not currently readily available and determine process to capture additional elements
  - Determine verification and checking process to ensure confidence in the data
  - Identify who will be responsible for capturing the data and any amendments required (eg Ministry of Health and Human Services currently captures information for injured people going off island for medical treatment, including a flag reflecting if the injury is work related would be useful)
  - Creation of a central repository of all data across both tprivate sector and public sector employers and articulate processes for different stakeholders to contribute to this repository
  - Automation of the collection of data and reporting into the central repository that is likely to be managed by MISSA.
- Monitoring considerations including:
  - Identifying which claims elements are important to monitor
  - Incorporating monitoring of trends over time as well as levels of experience, to enable examination of emerging issues
  - Incorporating monitoring that is reflective of the underlying risk to enable feedback to employers on hazardous activities.
  - Allow for data nuances such as timing impacts (discussed in section 4.3.4.1) and like with like comparisons (discussed in section 7.3).

## 2. Executive Summary

### 2.1. Background and Scope

The Republic of Marshall Islands Parliament, the Nitijela ("RMI"), passed the Workers' Compensation Act 2019 ("MI WC Act"), in 2019 on the basis that there would be implementation in the following year. The impact of Covid 19 led to the delayed timetable for implementation, such that there is an expectation the Act will be Proclaimed for commencement on 1 Oct 2023.

The MI WC Act includes the compulsory requirement for employers to provide workers' compensation insurance coverage for their employees in the Marshall Islands ("MI"). The Workers Compensation Task Force was established to review the MI WC Act and consider a range of issues for the scheme's establishment, and through consultation with businesses, the wider MI community, the Workers Compensation Board and Marshall Islands Social Security Administration ("MISSA"), propose amendments to RMI. MISSA is designated to administer the Marshall Islands Workers Compensation Scheme ("MI WC Scheme"), enforce compliance with insurers and employers and make decisions on claims, through its authority to investigate claims and make decisions on the eligibility of employees for benefits.

Part of the process in delivering the implementation of the MI WC Scheme requires setting a financially viable scheme based on affordable premiums for employers. There are equivalent circumstances to guide the Nitijela, such as the scheme in the Commonwealth of the North Mariana Islands ("CNMI"), implemented in 1990s, which containing mature experience that can be considered as guidance.

We understand the private sector will be privately underwritten by two insurers currently operating in RMI, Century Insurance Co. Ltd. thru Marshalls Insurance Agency ("MIA") and Moylan's Insurance Underwriters Inc ("Moyslans"), who will ultimately underwrite risks, determine premiums and manage claims. Entities under the public sector will be covered under the Government Self-funded Workers' Compensation Scheme ("GSFWC Scheme"). The intent is for RMI to set aside annual contributions that will provide enough capital to cover the scheme benefits as set out in the legislation, and to cover the costs of managing this scheme for a particular year.

We were engaged by MISSA to provide actuarial advisory services related to establishing the MI WC Scheme. This involved two stages of work, firstly a data discovery phase, and then an analysis phase to recommend an initial set of premium rates for the private sector, appropriate annual contribution for the GSFWC Scheme covering the public sector, and consideration of the Special Disability Fund ("SDF").

During the project, the data discovery phase evolved differently from original intentions, with extensive stakeholder engagement, collation, review, and clarification of data items. Whilst we received substantial data from the two insurers and CNMI Workers Compensation Commission, which we have examined and analysed, the available industry data has a number of limitations, and this report focuses on enabling the commencement of the MI WC Scheme, providing advice to assist MISSA in negotiations with insurers for adequate market-based premiums, and estimating annual contributions for the GSFWC Scheme.

As the MI WC Scheme evolves, new data and information will become available. This more MI specific experience, together with the nature of WC insurance (with annual renewable premiums), allows adjustment and refinement to the market-based premiums for the private sector, and annual contributions for the public sector. **It will be important for MISSA to establish correct data capture and tailored monitoring and reporting processes before the scheme commences to enable examination of claims management process and develop more involved analysis of emerging experience to inform appropriate adjustments to premiums and annual contributions.** Over the longer term, this process will assist the MI WC Scheme in developing a more rigorous framework backed by MI specific experience that will enable greater identification of emerging issues, understanding of injury drivers, feedback mechanisms to employers of hazardous/risky activities and opportunities for targeted intervention to improve employee wellbeing, and potentially reduce workers compensation costs.

## 2.2. Findings

### 2.2.1. Private Sector

The two current insurers will continue to underwrite the risk and set premiums. We understand they have stipulated they will be using the same underwriting process they use in CNMI to determine premiums, as set out in "NMIA-WCC-Tariff-and-Underwriting-Manual." ("CNMI Manual"). This manual sets out rules for industry classification and the corresponding industry tariff rates.

#### 2.2.1.1. Adjustments

For the two insurers, the CNMI industry rates are the starting point. We have estimated plausible adjustments to apply to these industry rates to allow for the differences between CNMI and RMI. The table below summarises the key areas of differences and the estimated adjustment to the CNMI industry tariff rates.

Table 1: adjustments to CNMI industry tariffs

estimated adjustment	description of adjustment
12%	reimbursement for medical expense (on-island)
115%	injury incidence
110%	business characteristics (ie mix of industries, size of business)
112%	off-island medical treatment
100%	average wages
<hr/>	
25%	Combined (on claim cost only)
40%	Final adjustment including allowance for expense and profit loadings
<hr/>	
<b>Higher risk industries (fisheries, construction, transport)</b>	
115%	additional loading for higher risk
<hr/>	
30%	Combined (on claim cost only)
45%	Final adjustment
<hr/>	
<i>1 NOTE analysis of reduced 3rd party adjustment fees on MI was incorporated into the medical reimbursement analysis</i>	

Overall for most industries we recommend MI industry tariffs to be 40% of the CNMI industry tariffs, reflecting the substantial difference in on-island medical expenses between the two territories. We understand three industries: fisheries, construction and transport; involve riskier activities in the MI workplaces, compared to the CNMI equivalents. To reflect this additional risk, for employers in these industries, we recommend MI industry tariffs to be 45% of the CNMI equivalent.

As shown in Table 1, the most important difference between CNMI and MI is in relation to the reimbursement of medical expenses. In CNMI, the WC Scheme reimburses full medical expenses. Around 90% of claims have a medical reimbursement component and the average size in CNMI is \$2,000 (USD). We understand the intent is for the MI Health Fund to continue to fund the on-island medical expenses of employees. Thus, the new MI WC Scheme will only be liable for the gap payments and to fund any additional medical reports for some claims at an average cost of these medical reports of \$100. Assuming about 20% of claims will require these additional medical

reports, combined with the gap payments, leads to an average cost of medical expenses of \$30 per claim. This substantial difference in obligations leads to a significant adjustment required to the CNMI industry tariffs.

Other key differences examined between MI and CNMI include:

- The incidence of injury is considered higher on MI, reflecting higher presentations to Ebeye Hospital compared to injury rates reported in CNMI and compared to one year of Majuro Hospital data; the absence of Occupational Health and Safety standards to regulate workplaces and promote addressing hazardous incidents; and an expectation that following the introduction of the new MI WC Scheme, injured worker behaviour may change with increased likelihood of reporting claims and seeking support under the new scheme to recover from workplace injury.
- Higher proportions of injured employees seeking off-island medical treatment, reflecting CNMI having more sophisticated equipment and specialist medical practitioners to be able to offer a greater spectrum of medical treatment either on-island or within Saipan. In addition, an expectation that under the support of the new MI WC Scheme, there may be greater willingness to send injured employees off-island to get specialised medical treatment where it is medically indicated. As the new MI WC Scheme is expected to reimburse off-island medical expenses, an increase compared to the CNMI component is recommended, to allow for higher anticipated expenses.
- The mix of industries on MI is different to CNMI, with MI having greater proportions of employers in riskier industries. We also understand there is consideration of small employers (with less than 4 employees) being exempt from purchasing workers compensation insurance. These changes in mix of industries could impact the relativities between the industry tariffs, requiring the tariffs aligned to riskier industries to increase.
- Average annual wages in MI are around \$8,100, and are just over half the average wages in CNMI of \$15,400. However, given that only about 25% of claims have a wage related payment and the mechanics of the industry tariff calculation allows for consideration of different wages, we have not recommended an adjustment for this component. Notwithstanding this, the wage level does impact minimum premiums and the maximum benefit payment of \$140 per week, as discussed in the next section.

### 2.2.1.2. Other Observations

#### *Small employers*

Whilst different sources of data imply different interpretations on the proportion of small employers in MI, the likely range is in between 50% to 75%, where a small employer is assumed to have less than 4 employees. Whilst comparable information across the two territories is challenging, the business registry information suggests CNMI has similar proportion of small employers to MI. However, key differences are observed in the type of employers with MI having a third of employers classified as "Retail – Mom & Pop". In CNMI, around a third of employers are in one of three industry classifications: Import, Restaurant or Retail – General Merchandise.

#### *Minimum Premium*

Insurers in CNMI incorporate a minimum premium on WC policies. The two insurers have agreed to \$200 (MIA) and \$150 (Moylans) as the minimum premium for the MI. With the lower MI wages, around 50% of employers would have calculated premiums based on the relevant industry tariff that are markedly lower than these minimum of \$200. In comparison, CNMI has 4% of employers using minimum premium, reflecting their higher average wages. For these impacted MI employers, the minimum premium ranges from 2% to 10% of the wage expense for that employer and thus the premium is a substantial proportion of the cost of running their business.

#### *Maximum benefit*

The legislation includes a maximum benefit of \$140 per week for a claim. Around 50% of MI employees have an average wage that equates to greater than this weekly maximum. In comparison, 95% of CNMI employees have higher average wages. How this limit will be practically incorporated into the new MI WC Scheme will need to be



monitored and considered carefully. For example, (say) an engineer with a wage of \$25,000 (\$480 weekly), the maximum benefit will be significantly inadequate and could lead to undesired impacts on claimant behaviour. In the private sector, insurers may offer higher weekly benefits with increases on premiums. The public sector may evolve to cover actual wages, with implications for the annual contribution to the GSFWC Scheme.

### 2.2.2. Public Sector

As part of the new MI WC Scheme, the Government Self-funded Workers Compensation Scheme ("GSFWC Scheme") will be funded by the RMI and cover the public sector. We understand at the introduction of the new MI WC Scheme the public sector entities will include Public Schools Systems ("PSS") and the Public Service ("PSC"). The ministries included in PSC are set out in Appendix D.

We recommend \$500,000 USD per annum is used to fund benefits under GSFWC Scheme. This also includes a 25% margin to allow for the management of claims and allowance for the 2% levy for the Special Disability Fund ("SDF")

This estimated annual contribution is based on an average industry tariff of 1%, selected as an appropriate rate at the commencement of the WC Scheme. This allows for changes in claiming behaviour, with possible increases in numbers of claims reported and increases in time off work reflecting employees seeking support through the WC Scheme to recover from injury. The rate also allows for nuances of a new WC Scheme allowing adequate coverage for variations across the MI atolls and fluctuations in claiming experience.

As the MI WC Scheme evolves, it will be important to monitor and analyse the emerging experience under the public sector to enable refinement to the annual contributions required. We note these public entities cover a mix of roles, with many of the roles within PSS and PSC are of lower risk, and a smaller proportion of roles with markedly higher levels of risk (e.g. in PSS: Nurses, Maintenance technician; and in PSC: Civil Engineers and Physicians).

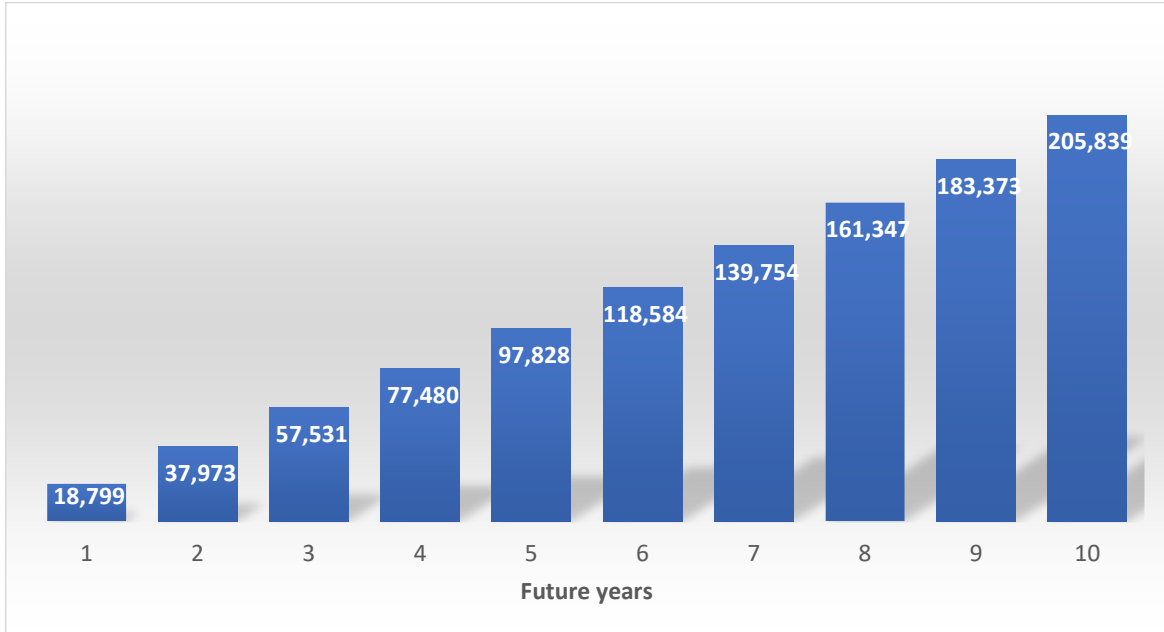
### 2.2.3. Special Disability Fund

Provision for a Special Disability Fund ("SDF") is set up in the MI Workers Compensation legislation. It makes provision for disability payments in accordance with specific criteria. The criteria involves an employee who has two or more accidents to the same body part, and due to the second accident, is deemed totally and permanently disabled. However, if the second subsequent accident had been in isolation, the injury would have led to partially disablement. The MI WC Scheme (on behalf of the employer) pays for the second accident as if in isolation (ie partial disability) and the SDF funds the difference in benefit entitlements given there were two accidents, that is the difference between total and partial disability benefits.

MISSA is considering the adequacy and viability of the SDF for the new MI WC Scheme. We note the provision for the SDF in the MI legislation reflects the provision in the CNMI WC legislation.

Currently the legislation incorporates a 2% levy to fund the SDF. The following graph shows the accumulation of that levy over the next 10 years, assuming the funds will be invested and accrue interest at 2%.

Figure 1: Accumulated SDF



Assuming claims on the SDF reach the maximum benefit of \$40,000 per claim, then after 5 years the SDF would have accumulated funds to cover 2 claims; 3 claims after 7 years and 5 claims after 10 years. We understand that there have been no claims on the CNMI SDF over the last 15 years.

## 3. Introduction

### 3.1. Background

The Republic of the Marshall Islands ("RMI") Parliament, the Nitijela, passed the Workers' Compensation Act 2019 ("MI WC Act"), in 2019 on the basis that there would implementation in the following year. The impact of Covid19 lead to the delayed timetable for implementation, such that there is an expectation the Act will be proclaimed for commencement 1 October 2023.

The intent of the new Marshall Islands Workers' Compensation Scheme ("MI WC Scheme") is compulsory cover for all employees of entities operating on Marshall Islands ("MI"). We understand the MI WC Act is closely aligned to the CNMI Workers' Compensation Act, with comparable benefits and premium mechanisms. Both WC schemes provide benefits for time off work, disability and death benefits, and provision for reimbursement of medical related expenses. Experience on CNMI shows that reimbursement for medical related expenses is a substantial part of the cost of that scheme, and as such WC Schemes are heavily affected by the cost of medical expenses, with these expense representing the largest cost component for WC schemes in the Pacific Islands.

The MI WC Scheme will be split into private sector and public sector parts. The private sector will be privately underwritten by two insurers currently operating in MI, Century Insurance Co. Ltd. through Marshalls Insurance Agency ("MIA") and Moylan's Insurance Underwriters Inc ("Moylans"). These insurers will provide coverage for the benefits as set out in the WC legislation. As such, whilst the Workers' Compensation Board will recommend an appropriate market-based premium, the insurance companies will ultimately underwrite the risk and set the premiums. Employers deemed part of the private sector will purchase workers' compensation policies from one of the two current insurers. We understand there is consideration being given to allowing small businesses with less than 4 employees to be exempt from purchasing WC policies. The size of the market, measured by number of employees, is considered in section 5.2.4.3

Entities under the public sector will be covered under the Government Self-funded Workers' Compensation Scheme ("GSFWC Scheme"). The intent is for RMI to set aside annual contributions that will provide enough capital to cover the scheme benefits as set out in the legislation, and to cover the costs of managing this scheme for a particular year. At the time of this report, we understand the entities covered by the GSFWC are all entities under the Public Schools System ("PSS") and Public Service ("PSC"). A list of the entities covered under the PSC is set out in Appendix D.

The Marshall Islands Social Security Administration ("MISSA") reports to the Mi WC Board, and in the interim reporting to Workers' Compensation Taskforce ("WC Taskforce") and key functions include:

- provide a final recommendation on the appropriate model for the new MI WC Scheme
- liaise with insurers regarding appropriate premiums for the private sector
- provide a recommendation on the reasonable annual contribution to fund the GSFWC Scheme
- provide guidance on the appropriateness of the Special Disability Fund.

### 3.2. Scope

We were engaged by MISSA to provide actuarial advisory services related to establishing the MI WC Scheme. This involved two stages of work. Specifically, our task was to establish an initial set of premium rates.

#### 3.2.1. Stage One: Data Discovery

This stage involved engagement with several pertinent stakeholders to develop the context of the MI WC Scheme, considering design and structure elements and incorporate allowances for specific nuances and environment particulars. Another key purpose was to consult with these stakeholders to discuss data available to enable analysis

of premiums (for private sector) and annual contributions (public sector) and provide guidance on the Special Disability Fund (“SDF”).

We note that the original scope was for Deloitte to set out minimum data requirements, and MISSA and its Advisor to be responsible for sourcing that data. During the project, the data discovery phase evolved differently from what was intended and we were much more involved in the stakeholder engagement than was originally envisaged. The actual data collation process required many iterations of receiving data, clarifying our understanding, and discussing additional data that could be useful. Once the scheme is launched, there is opportunity to design and implement an appropriate and efficient data capture process.

### 3.2.2. Stage Two:

Whilst we received substantial data from the two insurers and CNMI Workers Compensation Commission, which we have examined and analysed, the Data Discovery Stage highlighted what data sets are available, and limitations of that data. This report focuses on enabling the commencement of the MI WC Scheme, providing advice to assist MISSA in negotiations with insurers for adequate market-based premiums, and estimating annual contributions for the GSFWC Scheme. Through this process the following scope of analysis was defined:

- **Private sector:** Considerations to enable MISSA to discuss and negotiate premiums with the two insurers that will underwrite these policies. These considerations include:
  - *CNMI industry rates as a starting point* – with the close alignment of the MI WC legislation to the CNMI Workers' Compensation Act, and the two insurers stipulating they will be using the process they use in CNMI to determine premiums, as set out in “NMIA-WCC-Tariff-and-Underwriting-Manual”, the CNMI industry rates are the starting point for premium estimates.
  - *Plausible adjustments to the industry tariff rate:* Adjustments are estimated to allow for differences between CNMI and RMI. These adjustments consider CNMI and MI:
    - Reimbursement of on-island medical treatment costs.
    - Requirement to use 3rd parties. These expenses cover costs associated with underwriting assessor fees, negotiations with hospitals for medical fees, legal fees and adjustor fees. These fees may not all be required in MI.
    - Incidents of injuries.
    - Business characteristics such as risk profiles, mix of industries and size of employers.
    - Off-island medical treatment related expenses.
    - Average wages.
  - Implications of the maximum benefit of \$140 per week.
  - Implications of minimum premium of \$200 and \$150 per employer for MIA and Moylans respectively
- **Public Sector:** under the GSFWC Scheme:
  - Estimate of annual yearly contribution made by government to fund benefits for entities covered in that year.
  - Summary of the key functions required to manage a self-funded scheme and estimated cost of these functions
- **Special Disability Fund:** is set out in the legislation as a levy on premiums. For the purposes of this report it includes contributions from both the private and public sectors. We provided guidance on the appropriateness of the SDF through scenario analysis. Details of the Scenario analysis is set out in section 6.3.2. It provided an estimate of the likely number of claimants for each scenario.

The MI WC Act is closely aligned to the CNMI Workers' Compensation Act, in particular the premium mechanisms such as maximum benefits, partial disability benefits, waiting periods etc. As such, we have taken these elements as given in our review process.

### 3.2.3. Next Steps

Following the implementation of the new Workers' Compensation Scheme, experience specific to the MI will emerge. In addition, the existence of the new Scheme may see injured employees' behaviour change. To enable analysis of this emerging experience, it will be important to set up processes at the commencement of the scheme to enable MI specific experience to be captured and monitored, and enable analysis to be undertaken to understand the impact on the scheme and refine the premium estimates. We consider these next steps in section 7.

## 4. Approach

### 4.1. Stakeholders

We engaged with the following key stakeholders

- MISSA
- Workers Compensation Advisor
- Insurers Moylans and MIA
- CNMI<sup>1</sup> Workers Compensation Commission (“CNMI WC Commission”)
- Marshall Islands Ministry of Health and Human Services (MoHHS)
- Marshall Islands Public Service (PSC)
- Marshall Islands Public Schools System (PSS).

Appendix B sets out the stakeholder details.

### 4.2. Data

The table below summarises the key data items from various stakeholders.

Table 2 : Stakeholder Data

Stakeholder	Territory	items
MISSA	MI	<ul style="list-style-type: none"> <li>• MI WC Scheme information including legislation and supplementary amendments</li> <li>• Business registry information for private and public sectors</li> <li>• 2012 to 2022 Standard Industry Classification (“SIC”) business registry data</li> </ul>
Insurers	CNMI	<ul style="list-style-type: none"> <li>• WC policy details for policies sold                             <ul style="list-style-type: none"> <li>• MIA: 2 years</li> <li>• Moylans: 10 years</li> </ul> </li> <li>• Claims details for WC policies</li> </ul>
CNMI WC Commission	CNMI	<ul style="list-style-type: none"> <li>• Claims details for WC policies for policies from 2018 onwards</li> <li>• 2022 SIC Business registry data</li> <li>• Details of CNMI Special Disability Fund</li> </ul>
MoHHS	MI	<ul style="list-style-type: none"> <li>• Details of presentations to the Ebeye and Majuro Hospitals</li> <li>• Details of encounters at these two hospitals</li> <li>• Details for claimants requiring off-island treatment</li> </ul>
PSC	MI	<ul style="list-style-type: none"> <li>• Wages by employee role</li> </ul>
PSS	MI	<ul style="list-style-type: none"> <li>• List of ministries and wages by employee role</li> </ul>

Appendix C sets out the list of data provided and flags assumed in the analysis

<sup>1</sup> CNMI refers to the territories of “Commonwealth of the Northern Mariana Islands

## 4.3. Approach considerations

### 4.3.1. CNMI WC Scheme

Currently there is no WC scheme in MI. Whilst a small number of employers purchase WC insurance from CNMI insurers, there is little experience in MI to analyse to inform premium determinations.

The CNMI WC Scheme had been established since the early 1980s and has extensive experience. The CNMI WC Scheme was considered an appropriate comparable base for analysis purposes due to:

- The WC legislation in MI is closely aligned to the CNMI WC legislation; in particular, benefits and premium structures are very similar.
- Components of the MI legislation, such as the SDF, are based on the CNMI Workers' Compensation Act.
- CNMI industries, workforce and cultural premise are relatively similar to MI. Whilst there are some important differences between the two territories, CNMI is the territory which is the 'next best fit' for the MI.

Using the CNMI WC Scheme as a point of reference to create the MI WC Scheme has several benefits:

- *Efficiency*: using the CNMI scheme as a reference facilitates the establishment of foundational elements, such as premium levels.
- *Compliance*: The CNMI worker's compensation scheme is based on the Federal Longshore and Harbor Workers' Compensation Program, which is a well-established and recognized standard. Using the CNMI scheme as a reference can help ensure that the MI WC Scheme is compliant with equivalent legislative and regulatory considerations.
- *Adequacy*: Using the CNMI WC Scheme as a reference can help to ensure that the premiums and self-funded contributions for the MI WC Scheme are cost-effective, as the CNMI scheme has already been implemented and has a track record of being financially sustainable. Using this scheme as a reference point for the MI WC Scheme determination premium and self-funded contributions, should aid ensuring financial adequacy.

These two insurers together represent around 55% of the CNMI WC market. They are also the two insurers that will underwrite the private sector MI WC Scheme.

In addition, the CNMI WC Commission provided some business registry and claims data.

### 4.3.2. Insurance underwritten in CNMI

Private insurers in CNMI use the "NMIA-WCC-Tariff-and-Underwriting-Manual" ("CNMI Manual") to underwrite WC policies. This manual sets out extensive rules for determining the industry classification for different employers. These industry classifications are aligned to an industry tariff. The industry tariff reflects the risk level of a particular type of work. The higher the risk of injury or illness associated with a particular type of work, the higher the classification, and consequently the higher the premium calculated.

Some key considerations of these tariffs:

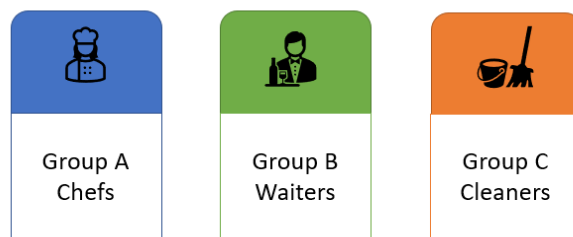
- The CNMI Manual was constructed some time ago, and the industry tariffs contained within it were also calculated some time ago. It is not clear exactly when these were constructed, however it is believed to be at least 20 years ago. Also, the territories included in the analysis of the industry tariffs were likely to be broader than CNMI, and included territories such as Hawaii. As such, the industry tariff may not be reflective of current risk levels of a particular industry.
- Not every employee within a business entity will be classified, but key roles for that business entity are assigned an industry classification.

- Industry tariffs are set across various employers within a particular industry. As such, tariffs may not accurately reflect the specific risks faced by individual employers or employees within a particular industry or job classification. For example, an employer may have implemented safety measures that have significantly reduced the risk of injury or illness for their employees, but they may still be assigned to an industry classification that reflects higher average risk and thus have to pay premiums that don't allow for these safety measures. In the future, a potential refinement to the Scheme is to allow for good practices which lead to lower claims costs to be reflected in employer premiums.
- Reliance on self-reporting - Employers may misclassify their employees in order to pay lower premiums. This is particularly problematic for employers with multiple locations or operations, as different regions may use different classification systems, making it difficult for employers to manage their workers' compensation costs.

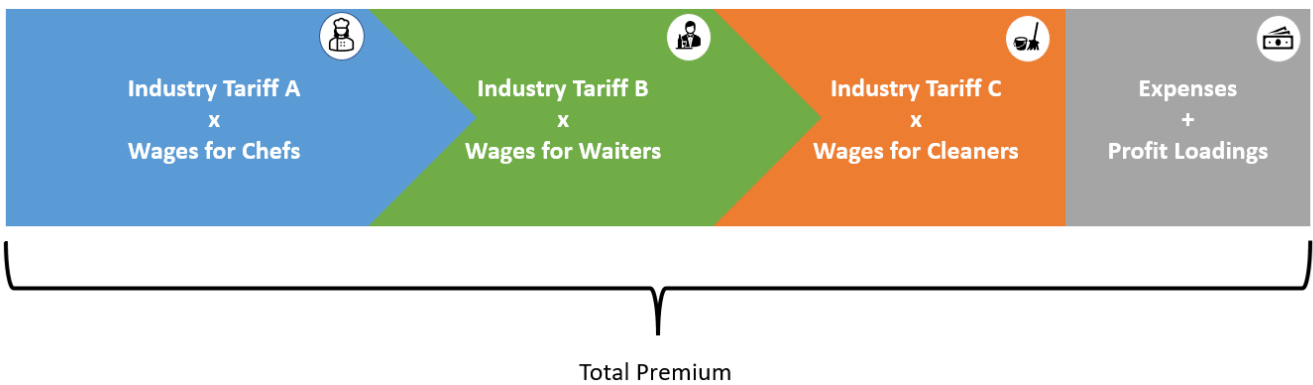
The WC premium charged to a business entity is calculated as the industry tariff multiplied by the wages for employees within that industry classification. The following simple example is used to illustrate how this would work.

*Figure 2: industry classification example*

Consider a business entity, a restaurant, with three industry classifications as seen below:



Their total premium is calculated below:



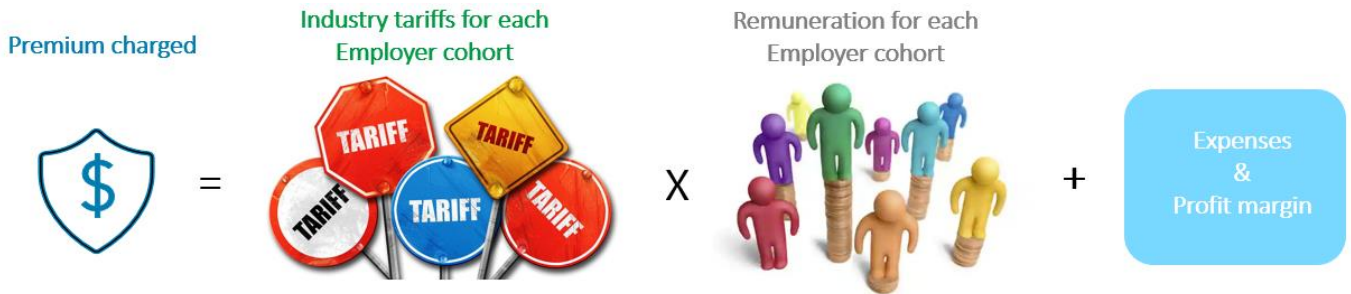
### 4.3.3. Adjustments to CNMI premiums

Whilst the CNMI WC Scheme is a good base for estimating the premium and self-funded contributions, there are some material differences that need to be allowed for. Given the limitations of the data provided, our approach was to consider these differences and then make recommendations of adjustments to the CNMI industry tariffs at an overall level. We note that these adjustments are estimated based on overall averages. Experience for different industries may differ.



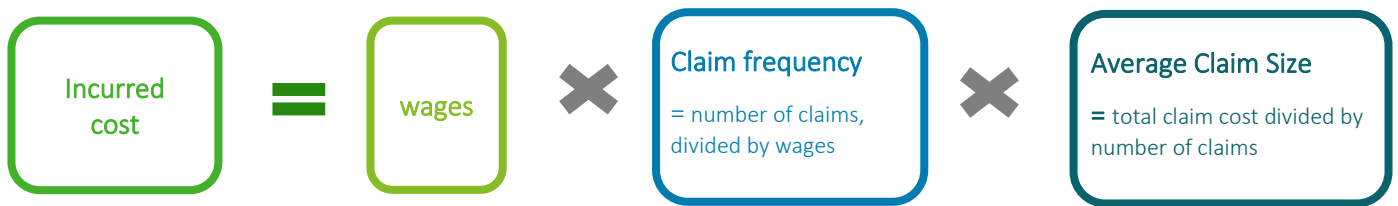
Adjustment was therefore considered at the overall level based on the main premium elements.

Figure 3: Premium elements



The industry tariff effectively represents the total payment costs (“incurred cost”) for that industry, divided by the total remuneration for that industry. The incurred cost components are depicted below.

Figure 4: Incurred cost components



To determine incurred cost, we had to estimate each of the three components on the right-hand side of the above equation. We also had to consider relativities between (*inter alia*) different industries to ensure that the determined premiums are reasonable both in aggregate, and relatively. This required allowance for aspects such as:

- Reimbursement for medical treatment costs on-island
- Requirement to use 3rd parties.
- Incidents of injuries
- Risk profiles, mix of industries and size of employers
- Extent of any off-island medical treatment
- Average wages.

More background on these components and the adjustments to premium that resulted is set out in section 5.2

### 4.3.4. Other Considerations

#### 4.3.4.1. Interpreting data

The interpretation of data requires consideration of some pertinent factors.

##### Impact of COVID

The pandemic COVID-19 impacted globally from March 2020 for around eighteen months, well into 2021, disrupting social cohesion and economic activity through transpiring quarantines and restrictions. Global evidence showing impacts on WC Schemes included:

- Potentially less claims reported
- Injured workers taking less time off work – resulting in lower loss wages benefits paid

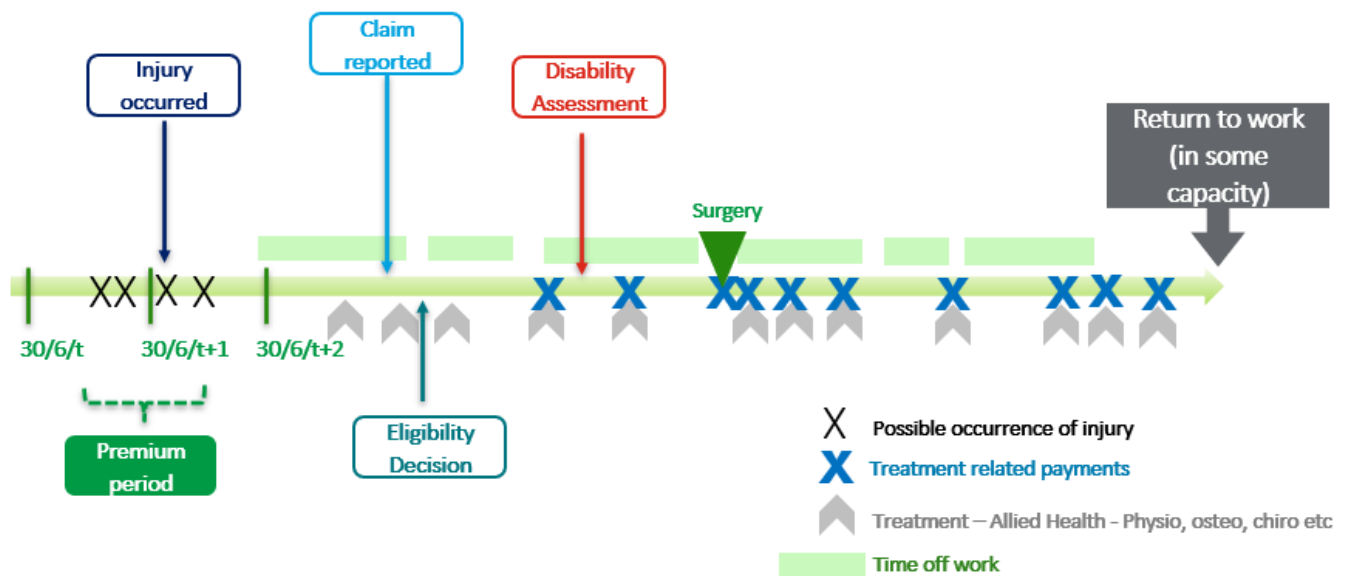
- Disruption to medical treatment, with lack of timely access to treatment and non urgent treatment postponed
- Flow-on impacts on mental health.

As such the experience across the 2020 and 2021 year needs to be considered carefully and may not be representative of future experience

**Injured workers compensatory pathway**

The following diagram shows the possible compensatory pathway an injured worker may follow.

Figure 5: Injured employees' compensatory pathway



Key timeframes within the compensatory pathway include time from the time the injury occurred, to when the injured worker reports the claim, to when all associated benefit costs are paid. The following table sets out the timing elements.

Table 3: timing elements for injured workers compensatory pathway

Timing element	Number of months	
	MII	Moylans
average start month for policies	mid way through policy year	
- from policy start to loss date	6	6
- from loss date to report date	1.5	1.5
- from report date to settlement date	18.5	5
- from loss date to settlement date	12-18	6.5

The time from injury to when all benefits payments have been made can be several months. The table shows MIA experience is around 12 to 18 months, whilst Moylans is faster at just over half a year on average.

This impacts interpretation of claims data for the more recent years. The accumulated payments may not have had enough time to develop. As such the total claim payment costs may be underdeveloped and not representative of the ultimate costs for the most recent year or two.

#### 4.3.4.2. Other MI Schemes

##### Health Cover Fund

This fund is administered by the MoHHS on behalf of RMI. Pursuant to Section 223 of the “*Marshall Islands Health Fund Act of 2002*”, all covered persons basic health care is covered by the Basic Health Benefits plan. Whilst the fund is intended to cover those insured, we understand in practice it effectively covers all medical and treatment related costs on MI. We understand most medical services and treatment are administered out of the two main hospitals on the MI, Ebeye Hospital and Majuro Hospital. People presenting to these hospitals only pay a ‘gap’ payment. Residents are required to pay \$5 per incident for out-patient treatment and \$10 per day for inpatient treatment. Non-residents pay \$20 per incident for outpatient treatment and \$20 per day for inpatient treatment. At the time of authoring this report, we understand from MoHHS that there is no intent to change this structure going forward. This means the RMI Health Fund legislatively provides for, or reimburses all health care costs, effectively subsidising the MI WC Scheme, which will only need to reimburse the gap payments to those employees injured at work.

This provision of medical treatment is a key difference to CNMI and is considered in section 5.2.5.

##### Social Security Fund

This fund is administered by MISSA. Whilst there are overlaps in entitlements for some components of this fund (e.g. disability benefits), there is no impact for the MI WC Scheme. On the basis of the RMI “*Social Security Act 1990*”, Section 137, if at the time of claiming disability benefits under this Act, the disabled worker is receiving a periodic workers compensation benefit, there is an adjustment to the Social Security disability benefit. This is expected to be low level impact. As such, no special allowance is required for the analysis of the MI WC Scheme.

## 5. MI WC Scheme

### 5.1. Legislative background

The Republic of the Marshall Islands (RMI) has a legislative framework that is based on the CNMI Workers Compensation Act and is in place to provide worker's compensation benefits to employees who are injured or become ill as a result of their employment. The main legislation governing worker's compensation in the RMI is the Marshall Islands Workers' Compensation Act 2019 ("MI WC Act"), passed in 2019 and expected to be proclaimed for commencement on 1 October 2023.

The MI WC Act requires employers to provide workers' compensation insurance coverage for their employees and establishes a Workers Compensation Board sets the structure of the WC Scheme and through MISSA as is administrator, administers the WC Scheme and make decisions on claims, through its authority to investigate claims and make decisions on the eligibility of employees for benefits.

Under the Act, employees who are injured or become ill as a result of their employment are entitled to a range of benefits, including payment of medical expenses, lost wages for period of time off work, and compensation for temporary or permanent partial or total disability (i.e., TPD, PPD, TTD, PTD). The Act also provides for the payment of death benefits to the dependents of employees who die as a result of a work-related injury or illness.

### 5.2. Adjustments to CNMI industry tariffs

As noted in Section 4.3.3, the data available enabled adjustments to be estimated at the overall level and as such represent average adjustments across all industries.

#### 5.2.1. Reimbursement of on-island medical treatment costs.

The extensive on-island medical costs experience in the CNMI and Guam WC schemes highlights that the cost of on-island medical expenses is the most significant issue for WC schemes in the Pacific Islands.

As set out in section 4.3.4.2, we understand the the MI WC Scheme will only need to fund the reimbursement of the gap payments for medical treatment required by employees injured at work and pay for additional medical reports for some claims.

We have estimated the average gap payment will be \$9 on average based on the following assumptions:

- Gap payments set out in section 4.3.4.2
- 93% of injured people presenting to hospitals for treatment are Residents and 7% are Non Residents
- 20% of those presenting will require inpatient stays of on average 2 nights.

We have assumed around 20% of claims will require an additional medical report with an average cost of \$100. Combining this with the average gap payment of \$9, results in an overall average cost of MI medical costs of \$30.

This comparative experience for the CNMI WC Scheme and the assumed data points for MI WC Scheme are set out in the tables below.

Table 4: the proportion of payment types for each claim

entity	Medical	Loss wages	death	off-island treatment	3rd party fees
Century Insurance (CNMI)	95%	25%	0%	2.5%	
Moylans (CNMI)	90%	30%	0%		100%
CNMI WC Commission	92%	15%			
MI assumed (CI)	92%	25%		2.50%	
MI assumed (Moylans)	92%	25%			33%

NOTE Century Insurance have NOT paid 3rd party for last 4 years  
not clear if Moylans Medical includes off-island

Table 5: the average size of payments for each type

entity	Medical	Loss wages	death	off-island expenses	3rd party fees
Century Insurance (CNMI)	2,000	750	-	3,300	-
Moylans (CNMI)	1,850	700	-		450
CNMI WC Commission		520			
MI assumed (CI)	30	700		3,300	
MI assumed (Moylans)	30	700			150

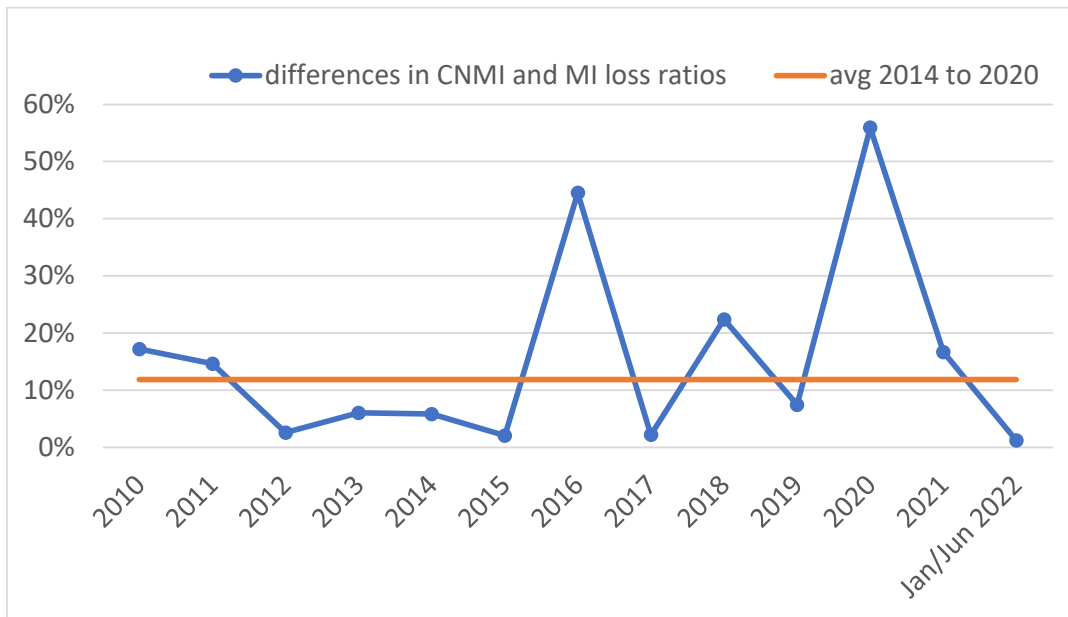
CI off-island expenses include airfares, hotels, taxis and per diem costs  
not clear if Moylans Medical includes off-island

This suggests the average adjustment is around 13% relative to MIA and 11% for Moylans.

Moylans also provided loss ratio data<sup>2</sup>, providing another comparative component. The graph below shows the difference between the loss ratios for policies covering businesses in CNMI and those for policies covering MI business. As a key difference is the medical reimbursements required, it could be assumed this difference is akin to the adjustment required to allow for the difference in medical reimbursements.

<sup>2</sup> Where loss ratios = total cumulative payment costs for policies in a year, divided by premiums charge in that year

Figure 6: Differences in Loss ratios for CNMI and RMI policies



The estimated adjustment for on-island medical reimbursements is 12%.

### 5.2.2. Requirement to use 3rd parties

Expenses associated with third parties include legal fees, fees to third parties to negotiate hospital costs, assessor fees etc. Century Insurance advise they ceased paying these expenses for policies from 2019. However, it is unclear if some elements of these expenses are incorporated into other payment types. Moylans have continued to pay these fees. As can be seen in section 5.2.1, Moylans pay third party expenses on all claims for an average cost of around \$450 per claim.

In the new MI WC Scheme, it is unlikely an explicit allowance will be required for these components. We have included consideration of third party fees in section 5.2.1, and thus no additional adjustment is incorporated.

### 5.2.3. Incidents of injuries

The riskiness of activities in different roles may be different between employers on CNMI and RMI. We understand CNMI businesses have greater awareness of and adherence to Occupational, Health and Safety Legislation, and greater consideration of reducing risk through targeted safety policies and practices.

From the data available we examined two types of measures of incidents of injuries – through claims incidence (proportion of claimants from all employees) and claims frequency (proportion of claims against total employee wages). This was able to be compared to MI presentations to hospitals, noting the hospital presentation data provided was for all presentations. We adjusted the data for working age and excluded key non-work injury encounters, such as relating to a motor vehicle accident. The following table sets out the comparisons.

Table 6: claim statistics

entity	avg # claims per year	claim incidence <sup>1</sup>	claim frequency <sup>2</sup>
Century Insurance (CNMI)	95	0.844%	0.084%
Moylans (CNMI)	45	3.000%	0.111%
CNMI WC Commission (low) <sup>3</sup>	155	1.270%	0.083%
<b>MI (hospital presentations)</b>			
- Ebeye	120	8.048%	
- Majuro	42	0.686%	

<sup>1</sup> claim incidence = number of claims divided by number of employees

<sup>2</sup> claim frequency = number of claims divided by wages (per \$1,000)

<sup>3</sup> CNMI rates considered low as a lag when Commn receives claim notification

The estimated claim incidence data for Ebeye hospital is much higher than for CNMI equivalents and higher than the one year of Majuro Hospital data available.

We understand that cultural differences between CNMI and MI may also impact these incident rates, as in MI, injured workers are less inclined to take time off work and to report an injury to their employer. This could mean also less inclination to seek appropriate treatment. Under the support of new MI WC Scheme, with compensation for lost wages, this behaviour could change. We recommend the number of injuries occurring and reported be closely monitored from the outset of the new Scheme.

Whilst the data available is limited and it is difficult to ascertain if injury incidence is markedly higher or lower than the CNMI experience, we have given some weight to the qualitative information and recommend a 15% loading for higher relative claim incidence in MI compared to CNMI.

## 5.2.4. Business characteristics for private sector

Risk profiles, mix of industries and size of employers are characteristics that could be markedly different for CNMI businesses compared to MI businesses.

### 5.2.4.1. Risk profiles

Whilst there is no data to compare riskiness of business on MI to CNMI, we understand the employers involved in fishing, construction and transportation industries have activities that are considered riskier than the activities of the CNMI employers in these same industries.

For these three industries, we recommend including a loading of 15%. Given the subjectiveness of this assumption, monitoring and analysing emerging experience for these industries is especially important.

### 5.2.4.2. Mix of industries (private sector)

Based on the business registry data for CNMI and MI, the following table highlights key industry where there are substantial differences in the number of employees working in those industries and a comparison of the tariff for that industry compared to an implied overall territory tariff.

Table 7: industries with differences in proportion of employees for MI compared to CNMI

<b>industry</b>	<b>propn of RMI compared to CNMI</b>	<b>relative industry tariff*</b>
banks	higher	lower
construction	lower	higher
fishing	higher	higher
health services	higher	higher
hotel services	lower	higher
restaurant	lower	higher
retail - mom & pop	higher	lower
utilities	unclear	higher
transport	higher	higher

\*compares the industry tariff for this industry and whether it is higher or lower than the average tariff (calculated across all industries)

The table also compares the industry tariff rate for each industry to the average across all industries. Those industries highlighted in green have a higher proportion of MI employees working in these industries compared to CNMI and have higher relative industry tariffs. The impact of this different mix of business on premiums is difficult to quantify. Many WC Schemes in other jurisdictions include a level of cross subsidisation across industries. Having more of higher risk industries could potentially increase the overall risk profile of the total cohort of the MI WC Scheme

**5.2.4.3. Size of employers**

The business registry data for CNMI and MI suggest a similar proportion, around 55% of “small” employers, defined as having less than four employees. We understand MISSA have recommended legislative change to allow small employers to be exempt from purchasing WC insurance. This would mean low wage businesses would be excluded from the WC Scheme and would impact and possibly skew the overall risk profile of the market covered under the MI WC Scheme.

**5.2.4.4. Impact of business characteristics**

Examination of these mix of industries suggests MI has a greater proportion of employers in riskier industries. Considering this in conjunction with the possibility of smaller employers exempt from the scheme impacts the mix of industries and could impact the relativities between the industry tariffs. This could lead to the MI market covered being generally riskier than the CNMI market covered under the WC Scheme. Thus we recommend a loading of 10% be added to the CNMI industry tariffs to allow for this possible additional risk

**5.2.5. Off-island medical treatment**

We understand at the time of writing this report that MoHHS will likely recoup off-island medical expenses from the new MI WC Scheme, as such consideration was given to the relative experience between CNMI and MI for off-island medical treatment. Data for CNMI experience is quite limited, but MIA experience suggest an average 2.5% of claims each year required off-island treatment. However, data was not available to examine the average cost of medical treatment.



The MoHHS provided extensive information on injured Residents going off-island for medical treatment. We understand many of these were for non-work related injuries or illnesses. Whilst interpreting the data is challenging, a conservative view would suggest a level of 10 to 20 employees per year would go off island for treatment, with costs of medical treatment varying considerably from \$30,000 to over \$100,000.

Our view is it is likely higher proportions of injured employees in MI will seek off-island treatment, reflecting CNMI having more sophisticated equipment and specialist medical practitioners to be able to offer a greater spectrum of medical treatment either on-island or within Saipan. In addition, an expectation that under the support of the new MI WC Scheme, there may be greater willingness to send injured employees off-island to get specialised treatment where it is medically indicated. Thus we recommend a loading of 12% be added to the CNMI industry tariffs to allow for higher off-island medical expenses that are expected to be reimbursed through the MI WC Scheme.

### 5.2.6. Average wages

The WC Scheme benefits that relate to wages are time loss (time off work), disability benefits and death benefits. Only 25% of claims have payments for these components, representing a much small proportion of the total payments, compared to the payments relating to medical reimbursements.

Average wages for different industry sizes are shown in the table below.

Table 8: Average wages

size group	# of employees	average wage	
		RMI	CNMI
small	1-3	3,113	14,534
medium	4-59	7,298	15,663
large	60+	9,315	17,495
<b>Total</b>		<b>8,164</b>	<b>15,419</b>

The table shows average wages in MI are just over \$8,100 and are just over half the average wages in CNMI of \$15,400. However, the impact of this differences in wages between the two territories is considered less material than the differences in medical expenses, as only about 25% of claims have a wage related component. Also, the mechanics of the industry tariff calculation allows for consideration of different wages. Notwithstanding this, the wage level does impact minimum premiums, and the maximum benefit payment of \$140 per week modifies impact of wage levels. This is discussed further below in the two sections 6.1.3.2 and 6.1.3.3.

## 6. Analysis and Financial Assessment

### 6.1. Private sector

#### 6.1.1. Structural overview

We understand the private sector will be privately underwritten by two insurers currently operating in MI, MIA and Moylan's Insurance Underwriters Inc ("Moylans"), who will ultimately underwrite risks and set premiums. Currently these two insurers write workers compensation policies across many of the norther Pacific islands, including a small number of voluntary policies in the MI. Importantly, the two insurers underwrite workers' compensation business in CNMI, and together represent about 55% of the WC business in CNMI. These two insurers will be the only two insurers operating in MI at the commencement of the new MI WC Scheme in October 2023.

#### 6.1.2. Premium estimate

We understand the two insurers have stipulated they will be using the same underwriting process they use in CNMI to determine premiums, as set out in "NMIA-WCC-Tariff-and-Underwriting-Manual" ("CNMI Manual"). This Manual sets out rules for industry classification and the corresponding industry tariff rates. The Manual also sets out minimum premiums charged to employers. MIA have advised they will set the minimum premium for MI at \$200 and Moylans advised a minimum premium of \$150.

To assist MISSA in considering appropriate market-based premiums for the private sector, our approach was to start with the CNMI industry rates set out in the CNMI Manual. Several differences between the two territories were considered including differences in:

- Reimbursement for medical expenses on-island
- Applicability of third party fees MIA and Moylan's pay. These expenses cover costs associated with underwriting assessor fees, negotiations with hospitals for medical fees, legal fees and adjustor fees. These fees may not all be required in MI
- Incidence of injury
- Business characteristics such as mix of industries, size of businesses
- Requirement for off-island medical treatment
- Average wages.

We have estimated plausible adjustments to apply to these industry rates to allow for these differences between CNMI and RMI. Our approach to estimating these adjustments is set out in section 5.2. The table below summarises the estimates.

Table 9: Summary of Adjustments to CNMI industry Tariffs

<b>estimated adjustment</b>	<b>description of adjustment</b>
12%	reimbursement for medical expense (on-island)
115%	injury incidence
110%	business characteristics (ie mix of industries, size of business)
112%	off-island medical treatment
100%	average wages
<hr/>	
25%	Combined (on claim cost only)
40%	Final adjustment including allowance for expense and profit loadings
<hr/>	
<b>Higher risk industries (fisheries, construction, transport)</b>	
115%	additional loading for higher risk
<hr/>	
30%	Combined (on claim cost only)
45%	Final adjustment
<hr/>	
1 NOTE analysis of reduced 3rd party adjustment fees on MI was incorporated into the medical reimbursement analysis	

Overall, for most industries we recommend MI industry tariffs be 40% of the CNMI industry tariffs. We understand three industries, fisheries, construction and transport, involve riskier activities in the MI workplaces, compared to the CNMI equivalents. To reflect this additional risk, for employers in these industries, we recommend MI industry tariffs be 45% of the CNMI equivalent.

### 6.1.3. Other Observations

#### 6.1.3.1. Small employers

Whilst different sources of data implied different interpretations on the proportion of small employers in MI, the likely range is in between 50% to 75%, where a small employer is assumed to have less than 4 employees. Whilst comparable information across the two territories is challenging, the business registry information suggests CNMI has similar proportion of small employers to MI. However, key differences are observed in the type of employers. The table shows proportion of employers in each of the industry groups deemed “small”.

Table 10: Proportion of employers for small industries

<b>employer industry</b>	<b>proportions (by industry)</b>	
	<b>RMI</b>	<b>CNMI</b>
RETAIL - MOM & POP	34%	0%
IMPORT	1%	9%
RESTAURANT	3%	11%
RETAIL - GENERAL MERCHANDISE	7%	17%

The table shows that MI have a third of employers classified as “Retail – Mom & Pop”, whereas CNMI have around a third of employers in one of three industry classifications: Import, Restaurant or Retail – General Merchandise.

### 6.1.3.2. Minimum Premium

Insurers in CNMI incorporate a minimum premium on WC policies. The two insurers have agreed to \$200 (MIA) and \$150 (Moylans) as the minimum premium for the MI. With the lower MI wages, around 50% of employers would have calculated premiums based on the relevant industry tariff that are markedly lower than these minimum levels. In comparison, CNMI has 4% of employers on the minimum premium, reflecting their higher average wages. For these impacted employers, the premium ranges from 2% to 10% of the wages for that employer and thus the premium is a substantial proportion of the cost of running their business.

### 6.1.3.3. Maximum benefit

The legislation includes a maximum benefit of \$140 per week for a claim, equivalent to the legislative criteria set out in the CNMI Workers' Compensation Act section 9306. Around 50% of MI employees have an average wage that equates to greater than this weekly maximum. In comparison, 95% of CNMI employees have higher average wages. How this limit will be practically incorporated into the new MI WC Scheme will need to be monitored and considered carefully. For example, (say) an engineer with a wage of \$25,000 (\$480 weekly), the maximum benefit will be significantly inadequate and could lead to undesired impacts on claimant behaviour. In the private sector, insurers may offer higher weekly benefits with increases on premiums. The public sector scheme may evolve to cover actual wages, with implications for the annual contribution to the GSFWC Scheme.

## 6.2. Public sector

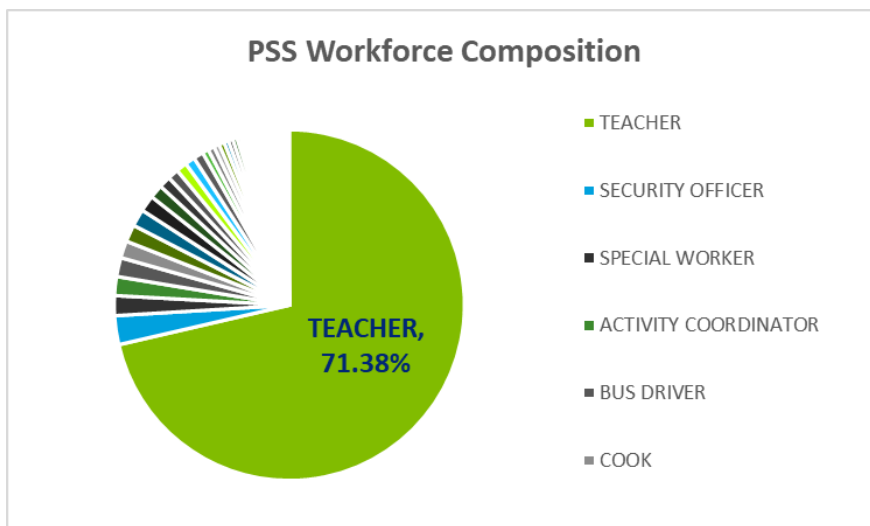
### 6.2.1. Structural overview

We understand that for the implementation of the new MI WC Scheme, entities under the public sector will be covered under the Government Self-funded Workers' Compensation Scheme ("GSFWC Scheme"). The intent is for the Nitijela to set aside annual contributions that will provide enough capital to cover the scheme benefits specified in the legislation, and to cover the costs of managing this scheme for a particular year. Public sector entities under the GSFWC Scheme will include Public Schools Systems ("PSS") and the Public Service ("PSC"). The ministries included in PSC are set out in Appendix D.

#### 6.2.1.1. PSS overview

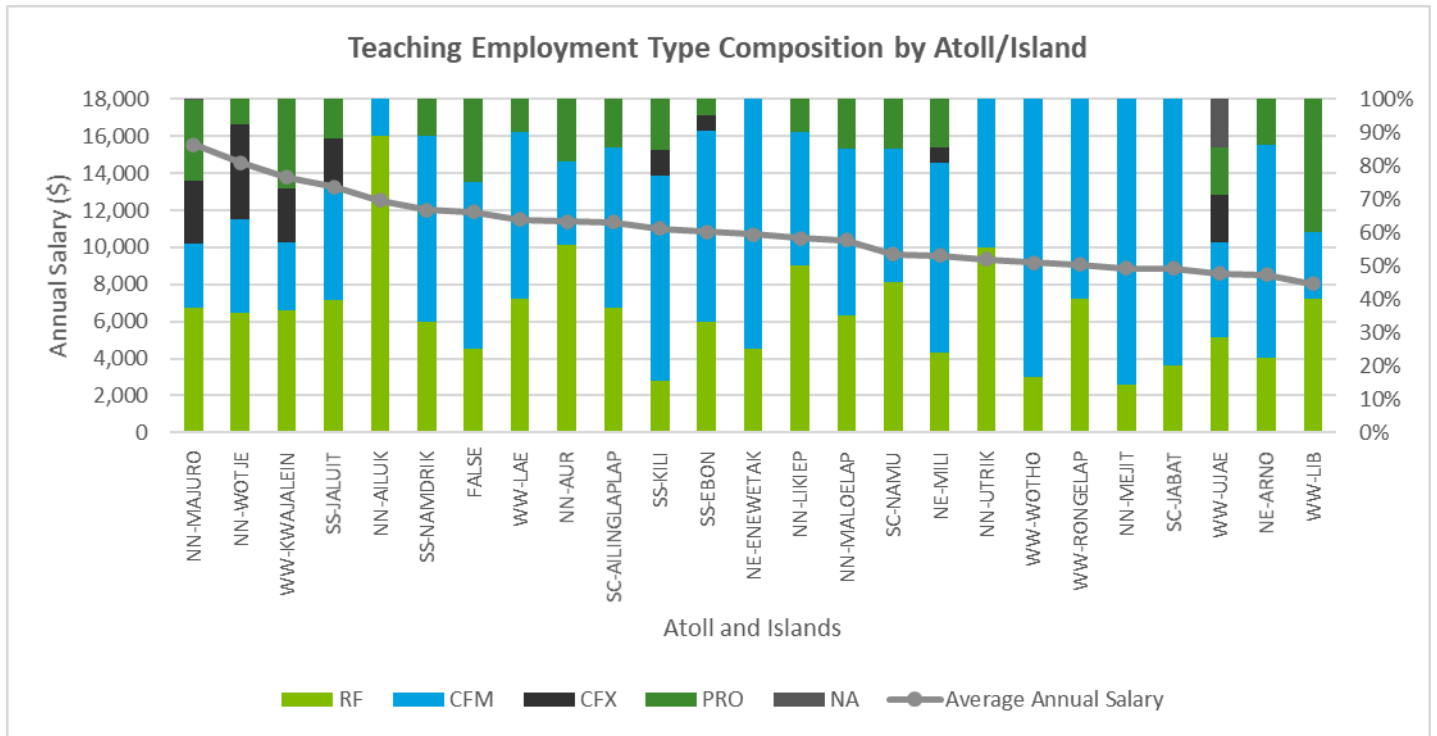
The following chart shows the proportion of roles for the PSS workforce, with the "teacher" role being the major role at just over 70% of the workforce.

Figure 7: PSS workforce composition



Whilst the CNMI Underwriting Manual has an industry rate for the “teacher” role, the “teacher” salary can vary considerable by location and by employment type as seen in the following chart.

Figure 8: Teacher Characteristics: average employment type and average salary



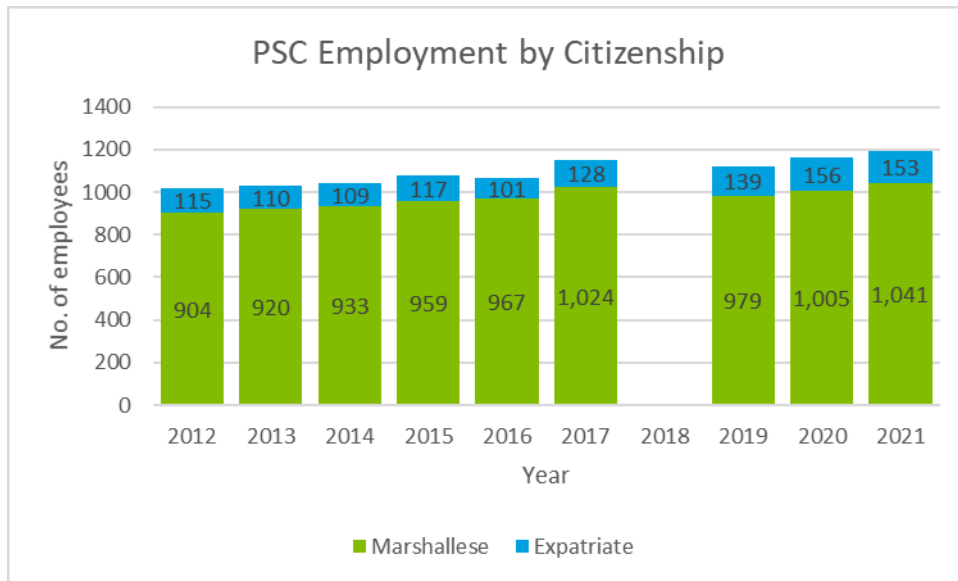
Where RF = Regular Full Time; CFM = Contract Full Time Residents; CFX = Contract Full Time Expat; PRO = Probation

There's a large difference in teachers' average annual salary depending on location and on employment type, which will impact the annual contribution "notionally" derived for each of these atolls. As the WC Scheme develops and evolves, it will be important to monitor the experience for the different atolls and incorporate into the analysis of the annual contributions required.

### 6.2.1.2. PSC overview

The Public Service is referred to in this report as “PSC” and covers approximately 20 ministries, with the full list set out in Appendix D.

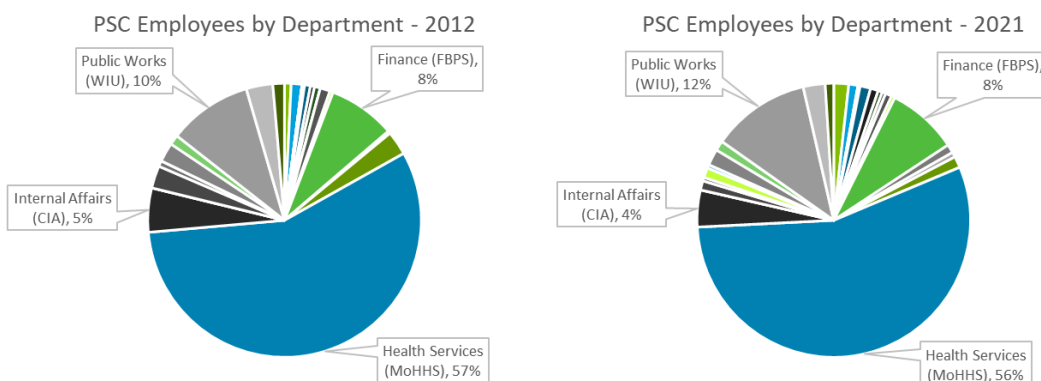
Figure 9: number of PSC employees over time



Note 2018 data was not available

The number of people employed by the PSC ministries has steadily increased over time, with the ratio of Residents to expatriate employees staying relatively constant over time.

Figure 10: Comparison of the composition of PSC employees by Department



The composition of the ministries covered under PSC has also remained relatively constant, although particular attention should be drawn to the biggest ministries in the PSC (Health Services, Public Works, Finance, and Internal Affairs). Hazards and injury incidence in these ministries will be key drivers of the experience for PSC.

### 6.2.2. Estimate of annual contribution

Detailed salary information enabled analysis of historic salary levels and a projection of the likely salaries across both PSS and PSC entities for the year from October 2023.

Whilst a few schools provided injury data, challenges in interpreting and connecting the data limited its usefulness for analysis purposes. However comparative data from CNMI was able to be analysed. Based on this data and also ensuring consistency across both PSS and PSC entities, a common approach to estimating the annual contribution was undertaken. It was aligned to the approach to the Private Sector. The industry tariffs from the CNMI Manual were used as a starting point.

Each ministry contains numerous employee roles. We understand the considerable underwriting task of classifying each employee to an industry grouping. For example, within the PSS, teachers' industry tariffs are 0.2% of wages,

however other roles such as security officer and school maintenance have industry tariffs of 6.7% and 3.2% of wages (respectively). Similarly, the PSC ministry has many varied employee roles with different industry tariffs, for example clerical office employees, auditors and accountants with relatively low tariffs (around 0.2% of wages), whereas other roles such as civil engineers and physicians are higher risk (around 0.7% of wage).

It was beyond our scope to replicate the considerable underwriting task of classifying roles to tariffs. Our approach involved undertaking scenario analysis for each entity to understand a plausible spectrum of contribution estimates. The scenarios consisted of selecting six high level groupings of staff into key roles for each entity. The applicable industry tariffs from the CNMI Manual were then applied to the salaries for each group and the total contribution across all groups was estimated.

Based on this analysis we recommend, across both entities, the annual contribution is based on an average industry tariff of 1%, selected as an appropriate rate at the commencement of the WC Scheme. This allows for changes in claiming behaviour, with possible increases in numbers of claims reported and increases in time off work reflecting employees seeking support through the WC Scheme to recover from injury. The rate also allows for nuances of a new WC Scheme allowing adequate coverage for variations across the MI atolls and fluctuations in claiming experience.

An expense loading assumption of 25% of the annual contribution is recommended to allow for the cost of managing the GSFWC Scheme incorporating an allowance for all costs and expenses incurred during the processing and administration of claims, including cost of staff computer equipment, training and development costs and office running costs. This is considered in section 6.2.3.2.

A 2% levy for the Special Disability Fund was incorporated to ensure this scheme is abiding by all relevant legislation.

Overall, the total contribution is estimated at \$500,000 USD, based on the following key assumptions:

- Annual project wages for year 2023/24 of \$38 million
- Industry tariff across both entities of 1%
- Including an allowance for claims management expenses of 25%
- Allowance for Special Disability Fund levy of 2%.

### 6.2.3. On-going scheme management

#### 6.2.3.1. Scheme monitoring and administration

As the RMI will self-fund the GSFWC Scheme, key functions are required to ensure effective administration of this self-funded scheme, appropriate management of claims and monitoring of experience evolving. These functions include:

- Dedicated staff to undertake the administration of the scheme and ensure the scheme meets its regulator obligations and reporting requirements
- Specialist staff to assist in the management including injury recovery advisors, case managers, return to work specialists
- Data and IT staff to establish appropriate data capture process and develop monitoring and reporting to provide oversight of the evolving experience
- Staff related costs such as training and development costs, training and IT requirements
- New systems may be required to be set up
- A proportion of overheads – such as rent for the space these scheme management staff occupy.

### 6.2.3.2. Expense loading

An expense loading is often considered as a proportion of WC costs – in this instance the annual contribution and provides for all costs associated with running a self-funded scheme (as set out in section 6.2.3.1.).

In this assessment, an expense loading of 25% of the annual contributions has been incorporated to cover all costs associated with running the GSFWC. With wages typically making up two thirds of the management expenses, this expense loading estimate allows for approximately 8 dedicated staff, covering a variety of required tasks including managing claims; Return to Work research to improve the recovery processes; promotion of Occupational Health and Safety; educating the workforce on risks and responsibilities.

## 6.3. Special Disability Fund

### 6.3.1. Overview

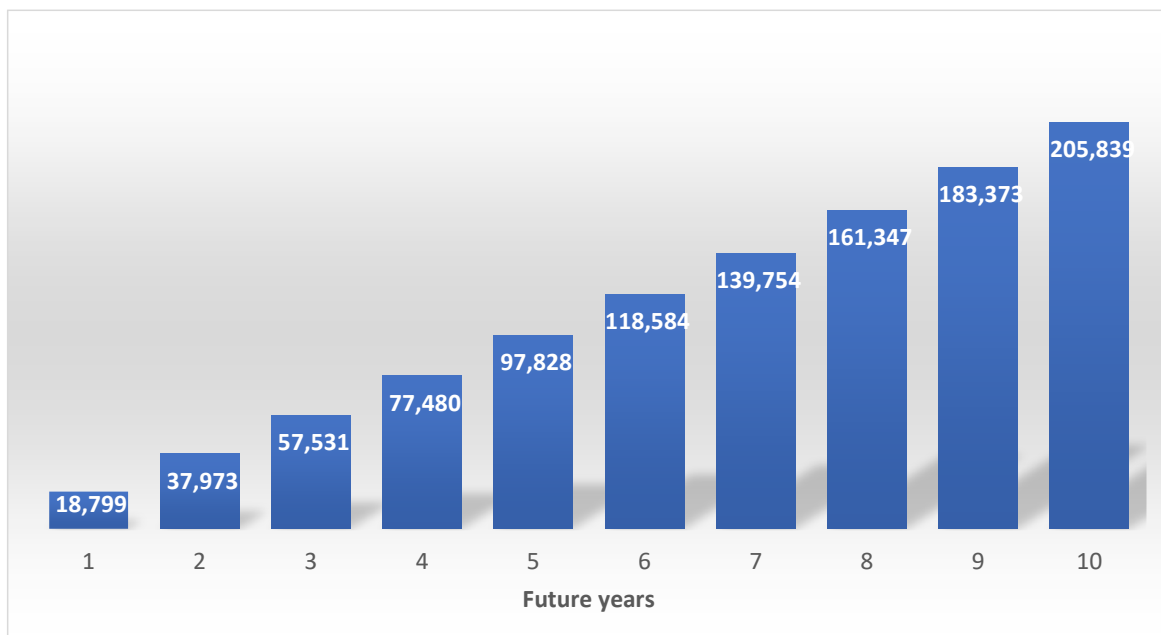
Provision for a Special Disability Fund (“SDF”) is set up in the MI Workers Compensation legislation. It makes provision for disability payments in accordance with specific criteria. The criteria involve an employee who has two accidents to the same body part, and due to the second accident, is deemed totally permanently disabled. However, if the second subsequent accident had been in isolation, the injury would have led to partially disablement. The MI WC Scheme (on behalf of the employer) pays for the second accident as if in isolation (i.e. partial disability) and the SDF funds the difference in benefit entitlements given there were two accidents, that is the difference between total and partial disability benefits.

MISSA is considering the adequacy and viability of the SDF for the new MI WC Scheme. We note the provision for the SDF in the MI legislation reflects the provision in the CNMI WC legislation.

### 6.3.2. SDF considerations

Currently the legislation incorporates a 2% levy to fund the SDF. The following graph shows the accumulation of that levy over the next 10 years, assuming the funds will be invested and accrue interest at 2%.

Figure 11: Accumulated SDF





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Assuming claims on the SDF reach the maximum benefit of \$40,000 per claim, then after 5 years the SDF would have accumulated funds to cover 2 claims; 3 claims after 7 years and 5 claims after 10 years. We understand that there have been no claims on the CNMI SDF over the last 15 years.

## 7. Next Steps

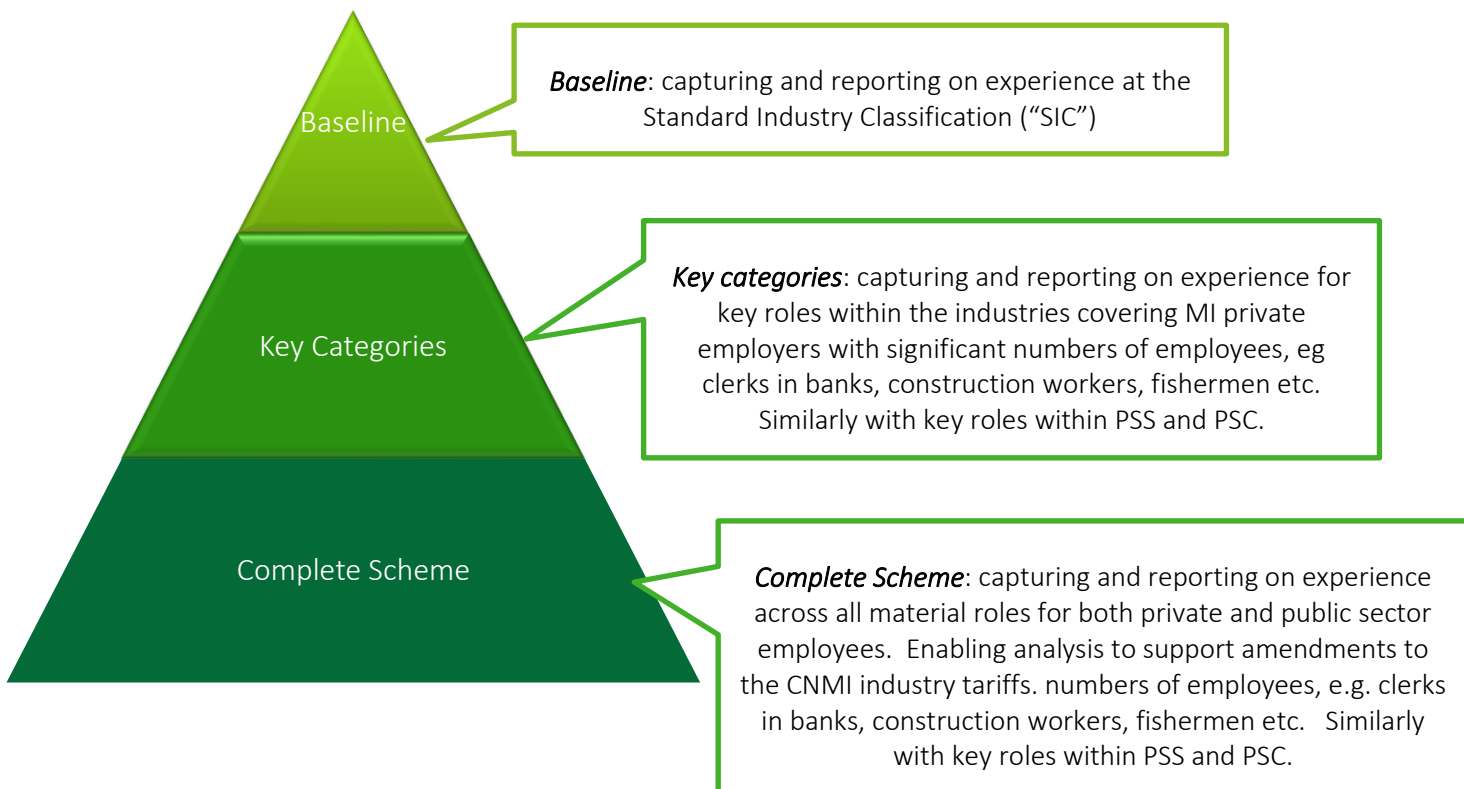
As the MI WC Scheme evolves, new data and information will become available. It will be important for MISSA to establish correct data capture and tailored monitoring and reporting processes before the scheme commences to enable more comprehensive analysis of emerging experience to inform appropriate adjustments to the premiums and annual contributions. We recommend a reporting and analytical map (the "Map") be developed to guide MISSA in developing rigorous framework covering the appropriate data capture, reporting and analysis process over the longer term.

This section of the report provides some initial thoughts on how MISSA can establish correct data capture, monitoring and analysis processes and some initial considerations. It will be important for MISSA to undertake a more complete consideration of the requirements and develop a comprehensive process and framework to enable the MI WC Scheme to evolve.

### 7.1. The Map

This Map should be designed to assist MISSA in developing a rigorous Framework, starting with baseline minimum requirements and progressing to include a full consideration across the whole scheme. This will enable the data capture, monitoring and analysis process to evolve as needed, and will enable greater identification of emerging issues, understanding of injury drivers, feedback mechanisms to employers of hazardous/risky activities and opportunities for targeted intervention to improve employee wellbeing, and potentially reduce workers compensation costs. The Map guides MISSA in setting up baseline requirements and to evolve the data capture, reporting and analysis process to enable the scheme to be refined and remain fit for purpose.

The following skeleton Map is suggested as a starting point.



## 7.2. Data capture considerations

It is important for the MI WC Scheme to identify and capture appropriate data that will enable useful monitoring of experience that evolves under the scheme, and then analyse this monitored experience to inform amendments to adequate premiums for the private sector employers, and annual contributions required to cover the public sector under the GSFWC Scheme.

The appropriate data to capture can evolve in line with the Map. For example, at the baseline level, all relevant data to SIC can be captured.

An initial list of considerations includes:

- Determine the complete requirements for policy details covering policies sold for private sector employers and coverages for employers under the GSFWC Scheme, e.g. the name of the entity, the date the policy commenced and the SIC this employer is assigned to.
- Determine the complete requirements for all claims elements reflective of scheme payments, e.g. payments divided into high level categories such as medical reimbursements (split between those incurred for treatment on MI and those incurred for treatment off-island), time loss payments, disability payments, death payments (if applicable) and other expenses.
- From the above lists, identify what data is readily available and what will require new processes to capture the additional elements.
- Verification and checking processes to ensure there is confidence in the data.
- Any additional fields or elements to be captured that will assist in the analysis, e.g. for injured people going off-island for medical treatment, including a flag to indicate if the injury is work related.
- How the data will be captured? Who will be responsible?
- Creation of a central repository of all data across both insurers in the private sector and across all entities covered in the public sector.
  - This can include consideration of timely contribution of data collected from various sources to the central repository.
- Automation of the collection of data and reporting into the central repository.

## 7.3. Monitoring considerations

Monitoring will report on trends over time and on current levels of experience. The monitoring framework can start at the baseline level and be developed in line with the Map.

Initial considerations for developing the monitoring framework include the following:

- Monitoring trends over time, as well as current levels of experience, to enable examination of emerging issues.
- Include elements from across the injured employees' pathway from injury to recovery, as shown in Figure 5 above.
- Enables comparison across different risk levels. This can be developed in line with the Map. For example, at the baseline level, comparison may be across SICs and/or entities within a particular SIC.
- Incorporating monitoring reflective of underlying risks, such as:

Exposure:  
- Numbers of employees  
- Employees wages

Injury incidence:  
- Numbers of injuries  
- Type of injury

cost of injury:  
- payments broken up into type

- Monitoring should aim to be implemented in a robust and automated way. It needs to function effectively and accurately, dealing with large datasets and adjusting to new data that may be added, or modification of existing data.
- Data monitoring for WC schemes has a lot of subtleties which need to be considered. The timing of elements can and will vary for different injury employees. The monitoring needs to allow for these timing considerations to ensure analysis of trends is interpreted correctly. E.g. an injured employee recovering from an injury 2 years ago will have been receiving medical treatment for those two years and may have had (say) one year off work. This total experience can not be compared to an employee that was injured 6 months ago.

## Appendix A - Abbreviations

Abbreviation	Reference
CNMI	Commonwealth of the Northern Mariana Islands
Deloitte, us, we	Deloitte Consulting Pty Ltd
GSFWC Scheme	Government Self-funded Workers' Compensation Scheme
MI WC	Marshall Island Worker's Compensation
MI WC Act	Workers' Compensation Act 2019
MI WC Scheme	Marshall Island Worker's Compensation Scheme
MIA	Marshalls Insurance Agency
MISSA	Marshall Islands Social Security Administration
MoHHS	Marshall Islands Ministry of Health and Human Services
Moylans	Moylan's Insurance Underwriters Inc
PPD	Permanent partial disability
PSC	Public Service
PSS	Public Schools System
PTD	Permanent total disability
RMI	Republic of the Marshall Islands
SIC	Standard Industry Classification
SDF	Special Disability Fund
TPD	Temporary partial disability
TTD	Temporary total disability
WC	Workers Compensation

## Appendix B – Key Stakeholders

Name	Entity	Stakeholder Description
<b>Adrian Nippress</b>	MISSA	Workers Compensation Advisor RMI
<b>Bryan Edejer</b>	MISSA	Acting Administrator, Marshall Islands Social Security Administration (MISSA)
<b>Avelino Gimao Jr (Ave)</b>	MISSA	Chief Financial Officer & Deputy Administrator, Marshall Islands Social Security Administration (MISSA)
<b>Cesar Garcia</b>	Moylans	Vice President & Chief Executive Officer, Moylans
<b>Gol Corpuz</b>	CIG	General Manager Century Insurance (Saipan)
<b>Lanie Deliguin</b>	CIG	Claims Manager Century Insurance (Guam)
<b>Gee Bing</b>	PSS	Associate Commissioner, Administration & Human Resource Management

## Appendix C – Data provided and used in analysis

Organisation	Market	Document Name
<b>Legislation and Regulations</b>		
MISSA	CNMI	CNMI Workers Compensation Act.pdf
MISSA	RMI	Workers Compenastion Act 2016
MISSA	RMI	SocialSecurityActof1990_updated-version.pdf
MISSA	RMI	Bill 148_PL2018-98-Law on taxi drivers and lump sum benefits.pdf
MISSA	RMI	Bill 45-Change in Retirement Age.pdf
MISSA		Email Correspondence 16 Mar 23 Adrian re insurer solvency & Banking commn.pdf
MISSA		Email Correspondence 17 Mar 23 MISSA worker numbers.pdf
MISSA		ebeye employee count 12.31.22.xls
MISSA		Ebeye Hospital Traumas Accidents and Injuries 2018-22.xlsx
MISSA		kwajalein employee count 12.31.22.xls
Public Service Commission	RMI - PSC	Public Service Regulations 2008-September.pdf
MISSA		Majuro employers ONLY for 12.31.2022 quarterly report 4.5.2023 (002).pdf
MISSA		SSQuarterlyCompliance20221231.xlsx
<b>Classification and Tariffs</b>		
CNMI Commission	CNMI	NMIA Workers Compensation Tariff and Underwriting Manual
MISSA / CIG		NMIA-WCC-Tariff-and-Underwriting-Manual.pdf
Moylans	Guam	WC JOB CLASSES.pdf
Moylans	CNMI	WCA-HAWAII RATES.xlsm
<b>PSC data</b>		
Public Service Commission		PSC annual reports - these items are all related. Items 1-3 are all from the PSC website.
Public Service Commission	RMI - PSC	Summary Report 2021.pdf
Public Service Commission	RMI - PSC	PSC Annual Report 2020_10-2021.pdf
Public Service Commission	RMI - PSC	PSC Annual Report 2019
Public Service Commission	RMI - PSC	PSC Employee Demographics Detail Report_10-20-2022.xlsx
Public Service Commission	RMI - PSC	PSC Employee Org Units_Contracts_Job Data Report_10-20-2022.xlsx
Public Service Commission	RMI - PSC	WorkersCompensation(Amendment)Act2022_V01 (Final) TF Mtg 14 November 2022.docx
Public Service Commission	RMI - PSC	RMI Workers Compensation Task Force Project Consultation Feedback .docx
<b>PSS data</b>		
PSS	MISSA	PSS Employee Data-MISSA-WCompensation-11-21-22.xls
PSS	MISSA	MOEST-PSS-FY19-23-MASTER PERSONNEL REGISTRY-MISSA WorkCom-1-10-23.pdf
PSS	MISSA	1. 20230111_clarifying questions for personnel and employee data.pdf
PSS	MISSA	1. 20230119_clarifying questions for data.pdf
PSS	MISSA	SS of MOEST-PSS-FY19-23-MASTER PERSONNEL REGISTRY-MISSA WorkCom-1-10-23.xlsx
PSS	MISSA	Incident or Injuries Report Lists.docx
PSS	MISSA	Injuries_accidents that occue in our school campuses.pdf

Organisation	Market	Document Name
<b>CIG data</b>		
CIG	RMI	2020 Production Register-GL-WC-RMI without insured name.xlsx
CIG	CNMI	2020 Production Register-WC-CNMI-SPN without insured name.xlsx
CIG	RMI	2021 Production Register-GL-WC-RMI without insured name.xlsx
CIG	CNMI	2021 Production Register-WC-CNMI-SPN without insured name.xlsx
CIG	CNMI	2012.10-2022.10 wc production report wo insured1
CIG	CNMI	SAMPLE BIGGEST CLAIM.xlsx
CIG	CNMI	SAMPLE CLAIM LISTING BY NATURE OF LOSS S & W.xlsx
CIG	CNMI	CLAIMS FILED ALL STATUS.xlsx
CIG	CNMI	SAMPLE REPORTED CLAIMS BY ENTRY DATE.csv
CIG	CNMI	SAMPLE CLAIM LISTING BY NATURE OF LOSS.xlsx
CIG	CNMI	SAMPLE REPORTED CLAIMS SPECIFIC PERIOD.csv
CIG	CNMI	SPN REPORTED CLAIMS JAN 1990 TO DEC 13 2022.csv
CIG	CNMI	BIGGEST OPEN CLAIMS WITH OUTSTANDING RESERVES.xlsx
CIG	CNMI	BY LOSS CATEGORIES.xlsx
CIG	CNMI	2012.10-2022.10 wc production report wo insured1
CIG	CNMI	policy data 10 yrs, by job descriptn
CIG	CNMI	1. 20230118_CIG data request - follow up
CIG	CNMI	3. 20230112_CIG payments by loss category
<b>MISSA</b>		
MISSA	RMI	Email Correspondence 21 Oct 22 Adrian N SDF
MISSA	CNMI/RMI?	SUMMARY of PROPOSED AMENDMENTS TO WORKERS COMPENSATION ACT 2022.pdf
MISSA		Task Force WHS and Wcomp presentation 12October2022.pdf
MISSA & CIG	RMI cf CNMI	Email Correspondence 26 Oct 22 Ave - minimum wages & prems
MISSA	RMI	Data Request_MISSA_initial.docx
MISSA	RMI	missa business registry data overview 11.03.2022.xls
MISSA	RMI	Wages breakdown 6.30.2012 to 11.03.2022.pdf
MISSA	RMI	Wages by industry_private sector 11.03.2022.pdf
MISSA	RMI	Wages by industry_public sector 11.03.2022.pdf
MISSA	RMI	Wages by private sector 11.03.2022-Copy.pdf
MISSA	RMI	Wages by public sector 11.03.2022.pdf
MISSA	RMI	Wages by range 11.03.2022.pdf
MISSA	RMI	Wages earner summary 11.03.2022- Copy.pdf
MISSA	RMI	Ave's comments and inputs to data request.docx
MISSA	RMI	WCTF Summary Report Nitijela 18January2023.pdf
MISSA	RMI	Rairok Rainbow Elementary School.docx
MISSA	RMI	Incidents and Injuries Data from long Island and Rairok Elementary Schools.pdf
MISSA	RMI	Missing data from PSS - priority request for injury and incident data from Majuro schools.pdf



Organisation	Market	Document Name
<b>Moylans</b>		
Moylans	RMI	getjobid155898.pdf
Moylans	RMI	getjobid155898A.pdf
Moylans	RMI	getjobid155897.pdf
Moylans	RMI	db wc claims 2010-sep2022A.xlsx
Moylans	RMI	FNI WC CLAIMS 2010-SEP2022.xlsx
Moylans	RMI	RMI Census Report
Moylans	RMI	2000 - 2022 WC PREMIUM LOSS STATS CNMI RMI.xlsx
Moylans	RMI	Email Correspondence Answers to your email questions.pdf
Moylans	RMI	1. 20221230_questions on Moylan's claims data and request for industry classification.pdf
Moylans	RMI	RMI Workers Compensation Including Apollo_Insoft 01062023.xlsx
Moylans	RMI	3. 20230112_policy data questions and answers.pdf
Moylans	RMI	Email Correspondence 13 Feb 23 Moylans and medical expenses.pdf
Moylans	RMI	Workers Comp policieis 02202023.xlsx
Moylans	RMI	Email Correspondence 23 Feb 23 Moylans plicy data Q&A pdf
Moylans	RMI	2020 - 33rd_annual_report_of_the_insurance_commissioner.pdf
Moylans	RMI	Copy of Insoft Claims CNMIRMI 2018 to 2022
<b>MI MoHHS data</b>		
MoHH	RMI	RMI Health Fund Act 2002.PDF
MoHH	RMI	RMI Health Fund Act (Amendment) 2018.PDF
MoHH	RMI	BASIC PLAN HANDBOOK 7.30.22.docx
MoHH	RMI	SUPPLEMNT HANDBOOK 7.30.22.1.docx
MoHH	RMI	Off-Island Treatments.PDF
MoHH	RMI	Email Correspondence 23 Jan 23 Meeting with Jack Niedenthal Secretary MoHH and others.pdf
MoHH	RMI	Email Correspondence 16 Feb 23 MoHH re off-island treatment.pdf
MoHH	RMI	Requested data on related injury accident Majuro Hospital 2022.docx
MoHH	RMI	CUMULATIVE EXPENSE OCTOBER-SEPTEMBER 2022.xlsx
MoHH	RMI	Traumas Accidents and Injuries 2018-22 (Ebye).xlsb.xlsx
MoHH	RMI	Email Correspondence 27 Apr 23 MOHH re propn residents to hosp.pdf
<b>CNMI WC Commission</b>		
CNMI and RMI	CNMI and RMI	Comparison - Guam WCA vs CNMI WCA vs RMI WCA and LHWCA.pdf
CNMI Commission	CNMI	What You Need to Know About CNMI WCC
CNMI Commission	CNMI	WCC Rules & Regulations
CIG	CNMI and RMI	Data Request_CIG_initial-comments.pdf
Other	RMI	Inclusive Business Startup Costs and Associated Fees
CNMI Commission	CNMI	CLAIMS REGISTER list - FY2018
CNMI Commission	CNMI	CLAIMS REGISTER list - FY2019
CNMI Commission	CNMI	CLAIMS REGISTER list - FY2020
CNMI Commission	CNMI	CLAIMS REGISTER list - FY2021
CNMI Commission	CNMI	CLAIMS REGISTER list - FY2022
CNMI Commission	CNMI	Year 2022 SIC Description
CNMI Commission	CNMI	WCC Occupational Injury Statistics
CNMI Commission	CNMI	FY2022 CNMI Gov't. Budget FTE's Personnel Costs
CNMI Commission	CNMI	CNMI SIC data template - full data.xlsx

## Appendix D – Public Service ministries

Ministry Name
Council of Iroij
Customary Law Commission
Economic Policy, Planning and Statistics Office (EPPSO)
Land Registration Office
Marshall Islands Scholarship Grant and Loan Board (MISGLB)
Ministry of Education
Ministry of Finance
Ministry of Foreign Affairs
Ministry of Health Services (MoHHS)
Ministry of Internal Affairs (CIA)
Ministry of Justice
Ministry of Weather
National Energy Office (NEO)
Nitijela (The Legislature of the Marshall Islands)
Office of Chief Secretary
Office of Environmental Planning and Policy Coordination (OEPPC)
Public Service Commission
Public Works (WIU)
Resources & Development (NRC)
Transportation & Comm. (T&C & IT)