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GEMS Newsletter Volume 7

vsletter GEMS Uncut

Alternatives to the Resources Tax

- by Oliver Glockner

Yes, there are viable alternative to not only the new Resources tax, but our entire taxation system.

No more Resources, GST, PAYG, Business Profits, Fringe Benefits, and Payroll taxes to name a few.

Replace them all with one new system:

A Transaction Tax System.

Imagine this as a concept;

Simply apply a 1% tax on all electronic transfer of funds into and within Australia. Just 1 cent in every dollar!

This is on all EFTPOS, ATM withdrawals etc. Any electronically logged money transaction.

For funds heading out of Australia the rate would be 2%.

Banks would be made accountable for recording and collecting all the tax for the government.

No more BAS or IAS hassles.

Can this work? Why not? Follow my logic ...

My research indicates that the annual Australian economy turn-over is in excess of \$30 trillion. This should not be confused with the much more publicized figures that are the national GDP [Gross Domestic Product].

The government budget figure is a total of around \$400 billion.

Again, stay focused on total budget figures rather than

the media hyped up nett surplus or budget deficit figures.

Monetary systems have changed in the last twenty years as compared to the last 2000.

In modern times virtually all Australian dollars change hands electronically at some stage, so its possible to determine the gross turn over from electronic records. Collect \$1 in every \$100 and you have enough tax to keep the federal government coffers full.

Nett result of the simplified tax system is guaranteed to be an increase in gross domestic happiness!

And there are more benefits;

Money laundering, and tax evasion with funds heading overseas is arguably the biggest dollar value issue with the relevant investigators.

Many foreign ownership companies avoid tax easily through price transfers, involving minimising taxation by artificially charging high prices or operating costs to subsidiaries in Australia, royalties, tax havens and such like.

Collecting 2 cents off every dollar heading overseas will easily counteract complex evasion strategies that thrive on complex taxation systems.

As soon as tax evasion criminals place funds in any banking or funding system,



Our situation as a Canadian publication sees it.

the tax will be collected.

Extra effort will be required with a Transaction Tax System: ATO Auditors and tax accountants will have to focus their attention checking banking records.

And the banks will be responsible for collecting all the tax.

No need for tax returns or any other annoying tax related paperwork.

The average Australian, and small business owner would no doubt prefer this



to our current complex tax system.

So what's the real down side to a Transaction Tax System?

Please; test my logic and let me know.

See the Facebook link on next pages for a discussion group.

- Oliver Glockner.

Special points of interest:

August 2010

• ALTERNATIVES TO THE RE-SOURCES TAX:

A TRANSACTION TAX.

- SPOT 2 TRACKERS—MORE THAN JUST AN EPIRB.
- WA MINE SURVEYING NEEDS QUALITY CONTROL.
- SHOULD AN ANNUAL REG-ISTRATION PROCESS BE PART OF WA MINE SUR-VEYING?
- CALCULATIONS CAN AT TIMES PROVIDE TWO DIF-FERENT ANSWERS.
- WHAT WE WHERE UP TO DURING THE WORLD CUP.

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DURING THE W

During the World Cup of 2010



The Soccer World Cup is over once again, and here's what we where up to whilst all the kicking and trumpet blowing was going on:



Shelley Heinrich

Shelley has headed up North to warmer climates, and is now at Cockatoo Island, having taken over from Kye.

With the whale migration season through there about to get into full swing, I expect the experience of working in a mine with whales only a hundred meters away is one she's not likely to forget!



Kye Chambers

Kye has moved on to Jack Hills with Greg.

The change in work is location is an exciting prospect, although many a Cockatoo where sad to see him leave.



Tristan Mander

Tristan is still at Cockatoo Island. In addition to the usual works, he's preparing the site for a Trimble automatic prism monitoring system.



<u>Greg Valli</u>

Greg is still at Jack Hills, helping out both as a Mine Surveyor and Engineer.

In addition to this he's also been up at Woodie Woodie, and set up a Trimble automatic prism monitoring system for them.



Oliver Glockner

We've finished our work at the BHP Billiton Olympic Dam. The project was an success with an astounding effort from all involved.

My many thanks to the team and those at BHP Billiton that enabled us to be involved in such an important and exiting project.

I've also had the good fortune to move onto another very exciting project;

I'm currently at the Cadia East Project in Orange, NSW.

As Operational Readiness Superintendent, I'm busy helping construct what will be Australia's biggest underground gold mine.

Imagine an underground mine that day in day out, for the next thirty years, will have a production output which is equivalent to having a 50t truck passing you up a decline every 60 seconds!

The usual challenges exist though: building this mine safely, to specifications, on a very aggressive schedule.

Would we really want it

any other way?

- Oliver Glockner



Spot 2 Tracker

This is not only a GPS messenger, its also a tracker.

You can use them like an EPIRB in a emergency, calling on rescue services to your location, or as a personal message and tracking service.

See the web site: http://www.findmespot.com

lf you have a yes-man working for you,

One of you is redundant.



Do you like the idea of changing to a simple 1% Transaction Tax system?

Check out the Facebook group link, and have your comment:

http://www.facebook.com/ group.php? gid=142426159110926&v=in fo

GEMS Newsletter

Spot 2 Tracker

- by Oliver Glockner

The SPOT Satellite GPS Messenger provides a vital line of communication with friends and family when you want it, and emergency assistance when you need it.

Using 100% satellite technology, SPOT works virtually anywhere in the world, even where mobile phones don't – all with the push of a button.

You can use them like an EPIRB in a emergency, calling on rescue services to your location, or as a personal message and tracking service.

Functions include;

SOS / 911: Use this function In the event of a life threatening or other critical emergency to notify emergency services of your GPS location and that you need assistance. The GEOS International Emergency Response



Center alerts the appropriate agencies worldwide.



With a push of a button a message is sent via email or SMS to up to 10 predetermined contacts.

Emails have links to Google Maps location points, and your waypoints can stored in your SPOT account for later reference.

Help: In the event of a nonlife threatening emergency, you can use this function to notify your personal contacts that you need assistance

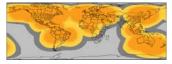
Check-in/OK: This feature allows you to let your friends and family know that all is OK with a pre-programmed message along with your GPS location.

Custom Message: This feature allows you to let your friends and family now receive a custom message along with your GPS location with a push of a button.

Track Progress: This feature allows you to send and save your location and allow contacts to track your progress in near real time using Google Maps.

GEMS is incorporating this technology in our team as another safety tool.

- Oliver Glockner



requirement in NSW.

NSW Mine Surveyors have no doubt on their mandatory work practices.

So what's my proposed solution? ...

Yes, introduce a CPD system as per NSW.

But only if at the same time, or before, WA introduces an audit system on Mine Survey practices and plans.

I encourage the WA Mines Survey Board to request that Mines Inspectors include checking survey departments in their site visits, and include surveying into HIF audits.

Striving for perfection, to achieve satisfaction.

- Oliver Glockner.



Surveying Invitation to Comment

The Western Australian Mine Survey Board intends to investigate the possibility of introducing Continuing Professional Development (CPD) and annual registration requirements for all Western Australian Authorised Mine Surveyors.

Before investigating the proposal any further, they wish to consult with the WA Mine Surveying community and supporting institutions to gather relevant information and views on the possible successful implementation of CPD & Annual registration.

All interested persons & organizations are invited to make a formal submission to the board to support, object or provide comment on any part of the proposal.

Formal Submissions can be emailed to: kemsig@kemsig.com.au or sent in writing to: WA MSB Industry Comment, PO Box 2667, Boulder WA 6432

Submissions will close on the 1st of October 2010

"If it ain't broke, don fix it"

ls the slogan of the complacent, The arrogant, Or the scared.

It's an excuse for inaction.

WA Mine Surveying Needs Quality Control - by Oliver Glockner

Submissions are currently being sought regarding whether WA Mine Surveying should adopt a continual professional development system such as NSW.

As I start this, Iwant to point out: the following comments are my own personal opinion, and are not necessarily that of our team members or that of GEMS as a corporate entity.

Please read on ...

WA needs to enforce a quality control system on mine surveying that is current before getting into continual!

Mandatory controls currently in WA Mine Surveying are those in the Mining Act and Regulations. At many sites we've come across, the Mine Managers and Surveyors struggle to comply even with these.

The WA Mine Survey Code of Practice is seen by many as an optional stipulation, not that of a mandatory one they should strive to work to, or better yet exceed.

Collecting CPD points for going to work, and junkets to seminars, does not make a professional!

Before WA heads down the CPD path, I believe we should have a stricter quality control on the way we currently work.

Where NSW differs from WA is that what is a guideline in WA is a legislative

One and One is Eleven

- by Shelley Heinrich

Not all things add up the same way.

The point in particular in this article is the differing methods of data calculations between theodolites and Mine Survey Office (MSO) software.

Coordinates can be calculated a number of ways. Software has been designed to compute the manual calculations we were once taught in school and this software is now integrated into electronic theodolites in the field and through software on the computers.

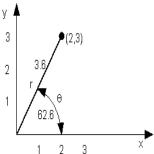
So what do we place our trust in for a true position calculation where a number of results can be given for the same data?

A recent survey of structural beams showed that while using the Leica 1103+ theodolite, points were set out at specific coordinates, checked and rechecked for accuracy of position and then recorded in the field. The data was then processed back in the office using Mine Survey Office (MSO) software.

The results differed by up to 3mm from the field results, depending on the processing method used.

MSO has 3 different processing methods being Polar, Cartesian and Polar-Cartesian.

In mathematics, the polar coordinate system is a twodimensional coordinate system which each point on a plane is determined by a distance from a fixed point and an angle from a fixed direction (r, θ). Hence in the diagram below, the polar coordinates will be in this case (3.6, 62.6). ↓ 🛔



In the Cartesian coordinate system the coordinates are perpendicular to one another with the same unit length on both axes (x,y). In the above diagram will be (2,3).

Station Set-Up Position.

MSO uses trigonometry to calculate the resected position for the surveys set-up, whereas the instrument uses a least squares method of calculating the instrument position through its 'freestation' and 'resection' programs in the field.

The instrument can also make true standard deviation assumptions about angles and distances as these are set for each model instrument. These variations can result in different values for various reasons including different mathematical calculations, rounding errors for observations and then in calculations, different assumptions in the instrument and also within MSO. In theory both computations are correct depending on which of the previously mentioned data you agree with.

Field observation Vs MSO processed coordinates

MSO's POLAR calculation uses only the raw data of angles turned and distance observations. It completely ignores any coordinates calculated by the instrument. Results proved to be within 3mm of field results, however due to its processing of the raw data, this method is recommended to be used for processing check surveys.

CARTESIAN uses only the calculated coordinate values from the instrument, these values are usually used on the surface or in an open pit environment where auditing of observations is not critical. Results using this method were up to 1 mm variation from field results.

POLAR-CARTESIAN is the most popular method and uses both the raw Polar observations and the calculated Cartesian position for each setup. This has several advantages. First it ensures the results calculated in the field match the results processed in the office. Second, it assumes the instrument is just as capable of calculating good results. Third, when performing a resection observation you can drop observed lines from the result and this can not be detected in post processing. So this method also has the advantage of knowing what observations are retained in resection calculations in the field because it is the instrument set up results that is adopted.

Sources of information contained herein were compiled between the mathematical theory of coordinate calculations, Brendon McCormack and Benchmark Software, and a field survey to show the variations in results between all methods.

- Shelley Heinrich



Coming Up Next ...

In our next editions you are very likely to see articles we're already working on, such as;

Critical Paths in a Schedule, and

Communication Styles

Stay tuned ...

"The day soldiers stop bringing you their problems is the day you have stopped leading them.

They have either lost confidence that you can help them or concluded that you do not care.

Either case is a failure of leadership."



The quotes and words of wisdom used in this volume are from a presentation doing the email rounds, and are attributed to;

General Colin Powell Chairman (Retired) Joint Chiefs of Staff United States of America